

ON TRACK TOGETHER

2023 ESG REPORT



THE
GREENBRIER
COMPANIES

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About Greenbrier

Designs, builds and markets freight railcars in North America, Europe and Brazil

Provides freight railcar wheels, parts, maintenance, management and retrofitting services in North America



\$3.9B

Annual revenue



13,400

Owned railcar lease fleet



30,900

New railcar backlog

Better Together Strategy

In fiscal year 2023, Greenbrier introduced a multi-year strategic plan, first outlined at our 2023 Investor Day. The plan seeks to optimize our industrial footprint for efficiency and margin enhancement. It will also expand our services business to drive recurring revenues and reduce the impact of manufacturing cyclicality. Further, we will maintain our North American railcar manufacturing leadership position and drive growth in the European and South American markets we serve. For more on our strategic plan, see our [2023 Investor Day presentation](#).

Goals Progress & Road Map

<p>1 new railcar manufacturing facility and eight maintenance locations achieved at least one year without a recordable incident in fiscal year 2023</p>	<p>925 solar panels installed at Greenbrier Tlaxcala with a projected average energy production of 67,000 kW-hours per month</p>	<p>49% recycled steel purchased for railcar manufacturing</p>	<p>8 Employee Resource Groups (ERGs); two introduced in fiscal year 2023</p>	<p>46,000 U.S. tons material reused, reclaimed or recycled through Sustainable Conversions</p>	<p>\$1M+ invested in communities with Greenbrier operations</p>
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✔ Achieved ⚙ In Progress

FISCAL YEAR 2023

GOAL	CATEGORY	PROGRESS	PAGE
Deploy new onboarding framework across U.S. operations	 People	✔ Greenbrier rolled out a new program that spans the employee's pre-hire period through the employee's first 90 days of employment. Today, our onboarding at Greenbrier equips employees and managers with information and tools to guide them through successful integration. It also establishes ongoing connections to encourage a culture of open dialogue early in the employment cycle.	32
Identify successes and gaps in our vendor selection approach	 People	✔ We developed a strategy committee to analyze our vendor selection approach. This group will use this information to develop the next steps in a holistic review of our supply chain partners, including building a vendor survey to track supplier diversity and working with executive leadership to increase our supplier participation toward meeting our environmental, social and governance (ESG) objectives.	28
Establish a recognition and rewards program	 People	✔ Greenbrier launched GBX RailDepot, an online communication platform for connecting people and information. Employees can view information about the company, access employee resources and recognize others for their contributions.	34
Expand the employee survey to our operations in Mexico	 People	✔ Mexico hosted the employee survey in fiscal year 2023 and received a 95% participation rate. The facilities are convening additional conversations with leadership to help progress on action items that resulted from the survey.	34
Expand waste management tracking to include what our facilities send to landfills	 Environment	✔ Waste tracking has been implemented and will be refined to better track waste and material recycling efforts.	44

FISCAL YEAR 2023 (Cont.)

<p>Implement a formal Environment, Health and Safety (EHS) policy rollout and initiate an environmental audit process</p>	 <p>Environment; Safety</p>	 <p>Greenbrier's EHS policy was rolled out through multiple communication processes and has been posted at each manufacturing facility. In addition, we have started third-party environmental compliance audits at several of our larger facilities. Compliance assurance processes are being put in place to provide improved corporate oversight on environmental activities at the production level.</p>	<p>19</p>
<p>Audit seven additional manufacturing facilities for corporate safety standards</p>	 <p>Safety & Quality</p>	 <p>We conducted audits at eight plants. Opportunities for improvement were identified and have either been implemented or are in progress.</p>	<p>19</p>
<p>Fully implement new non-destructive testing (NDT) techniques</p>	 <p>Safety & Quality</p>	 <p>In our 2022 ESG report, we established the goal to fully implement new non-destructive testing (NDT) techniques in fiscal year 2023. We are reevaluating this approach and will share an update on our processes in the future.</p>	<p>23</p>
<p>Internal audit of ESG data</p>	 <p>Safety & Quality</p>	 <p>All (100%) of Greenbrier manufacturing facilities were audited by our internal audit team. The sample data set was verified and, if necessary, corrected. If specific data was corrected from the sample set, that data was audited for the entire year. The process was upgraded so monthly data is now tracked and compared to online data records to provide ongoing assurance of data quality. A new environment, health and safety standard was introduced to formalize the process.</p>	<p>12</p>

FISCAL YEAR 2024

GOAL	CATEGORY	PROGRESS	PAGE
<p>Implement air quality, waste management and water quality control procedures</p>	 <p>Environment</p>	 <p>Drafts have been developed.</p>	<p>44</p>
<p>Bolster employee feedback loops through additional surveys in the U.S., Mexico and Europe</p>	 <p>People</p>	 <p>In fiscal year 2023, we issued an employee survey in Mexico and received a 95% response rate. We also began drafting surveys for additional stages of the onboarding experience and for employee surveys in markets beyond the U.S. and Mexico.</p>	<p>34</p>
<p>Introduce an enhanced safety onboarding approach that provides a comprehensive and consistent framework across our North American operations</p>	 <p>Safety & Quality; People</p>	 <p>Onboarding tools and videos are in draft process. The specific safety training can vary slightly between facilities so it is important to provide tailored materials and flexibility for each location to onboard appropriately.</p>	<p>32</p>

2025 & BEYOND

GOAL	CATEGORY	PROGRESS	PAGE
<p>Create five new pathways to providing consistent diversity scholarship funding by 2025</p>	 Community	<p>4/5 complete</p> <ol style="list-style-type: none"> 1. William A. Furman Technical Training Scholarship: This scholarship is given to a high school senior pursuing an education in a technical field at Portland Community College. 2. Black River Technical College (BRTC) Scholarship: We maintain a partnership with the BRTC in Paragould, Arkansas. This scholarship supports students obtaining a degree in a technical field. 3. University of Oregon Foundation Law Program: University of Oregon students who receive these scholarships serve at nonprofits that serve the public interest. Typically, the recipients of legal assistance are in underserved and underrepresented communities. 4. Black American Engineering Scholarship: This organization promotes educational STEM opportunities for Black American students. 	<p>59</p>
<p>Establish Volunteer Time Off (VTO) program by 2025</p>	 Community	<p> VTO rolled out to identified employee groups.</p>	<p>58</p>
<p>Implement a corporate-level Environmental Management System (EMS) by 2025</p>	 Environment	<p> In addition to several specific action steps, we will finalize the EMS standards and will begin training across locations in fiscal year 2024.</p>	<p>41</p>
<p>Reduce Scope 2 GHG emissions per unit of output by 20% by 2027 (from 2022 baseline)</p>	 Environment	<p> Our first pilot project for site-level generation of renewable energy was implemented at our manufacturing plant in Tlaxcala, Mexico.</p>	<p>42</p>
<p>Engage in an external ESG audit by 2025</p>	 ESG Strategy	<p> We will develop a scope for an ESG audit to further validate our report data.</p>	<p>12</p>
<p>Fully align with the Task Force on Climate-Related Financial Disclosures (TCFD)</p>	 ESG Strategy	<p> We identified a vendor to evaluate the feasibility of hosting a 2-degree Celsius scenario event.</p>	<p>65</p>



Message from Our CEO



Greenbrier has a legacy of providing products and services that enhance rail freight transportation and the communities we serve. The world is transitioning toward a lower carbon, more socially conscious future, and Greenbrier is proud to do our part. Greenbrier's history of employee health and safety, product quality and innovation, social and environmental responsibility and dedication to communities continues to break new ground. We have also evolved by embedding ESG principles in our business and risk management strategies.

In fiscal year 2023, we continued to align our report to the TCFD framework. We developed a gap analysis to determine next steps toward full alignment, and assessed physical risks at our facilities worldwide.

In addition to our TCFD progress, we have made advancements in product quality and engineering expertise, and we also progressed on our Scope 2 GHG emissions reduction goal by introducing a renewable energy project at Greenbrier Tlaxcala in Mexico.

Dedication to our employees deepened in fiscal year 2023. We introduced our Dynamic Hand Safety program to address the most significant injury type at Greenbrier. We also built new programs to support employee growth and development, as well as diversity, equity and inclusion (DEI). We hosted our first-ever DEI Summit in 2023 to celebrate our successes and develop new goals for the future of our Inclusion, Diversity, Equity, Access and Leadership (IDEAL) commitment.

Finally, Greenbrier implemented our Better Together Strategy in fiscal year 2023. Our intent is to align Greenbrier across business units to continue our manufacturing leadership, grow our services activities, enhance manufacturing margins and build recurring revenue. Our new strategy is based on the premise that Greenbrier will perform Better Together as a unified operation.

Greenbrier has made great strides in our ESG journey. I encourage you to read about the actions we are taking in fiscal 2023 and in the future.

Lorie Tekorius
CEO & President

Awards & Recognitions

America's Most Responsible Companies
Newsweek and Statista

Best Small Companies
Forbes

Best ESG Investment Ideas for 2023
TD Cowen

Women in Rail, Sandra Ocaña
Railway Age

Women in Rail, Lindsay Day
International Railway Journal

Fast Tracker, Jeremy Dark
Railway Age

50/50 Women on Boards
3+ Rating

HR Leadership Award, Laurie Dornan
Portland Business Journal

Most Admired Companies
Portland Business Journal

Corporate Philanthropy
Portland Business Journal

Outstanding Executive of the Brazilian Railroad Industry, Eduardo Scolari
Railroad Magazine

Best Freight Railcar Manufacturer, Greenbrier Maxion
Railroad Magazine

Corporate Platinum Partner
League of Railway Women

2023 Manufacturing Leadership Award Finalist, Virtual Sample Railcar
National Association of Manufacturers



ESG at Greenbrier



[Our ESG Approach](#)

[Materiality Assessment & Top ESG Priority Issues](#)

[Stakeholder Engagement](#)



ESG AT GREENBRIER

SAFETY & QUALITY

OUR PEOPLE

ENVIRONMENTAL

GOVERNANCE

COMMUNITIES

APPENDIX

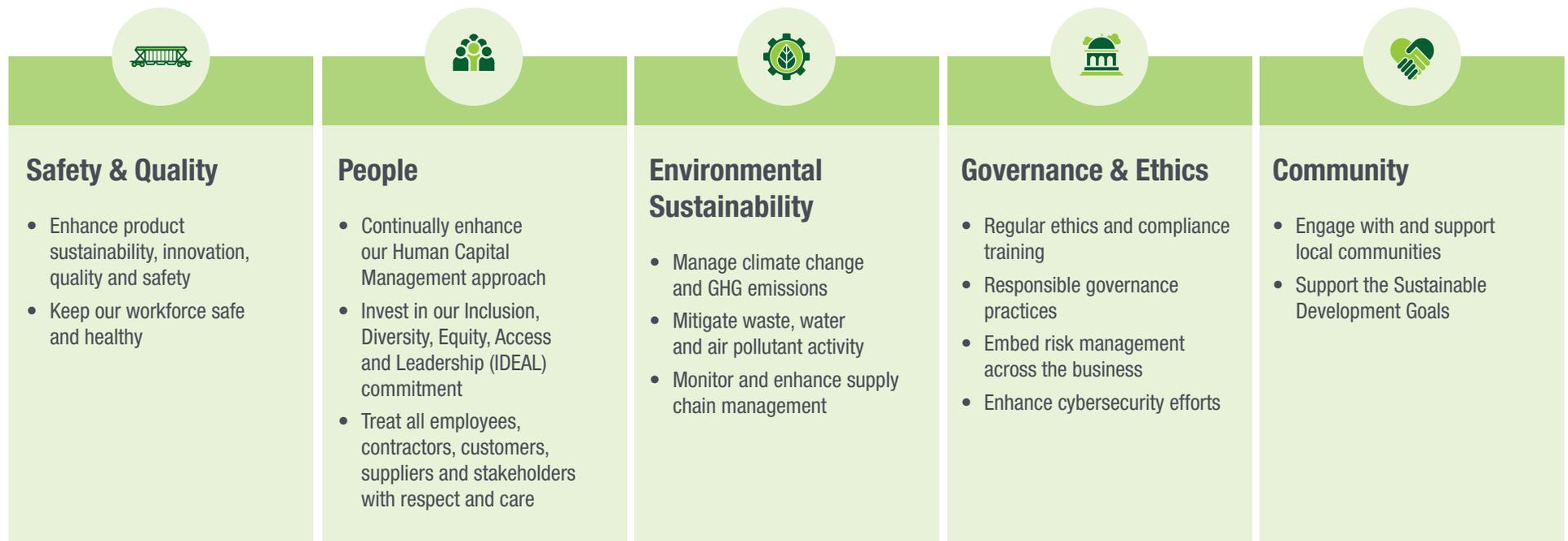
ESG at Greenbrier

Our ESG Approach

We prioritize innovative sustainability strategies to deliver impact at a global scale and seek to build trust with stakeholders by achieving measurable progress toward our sustainability goals.

Greenbrier’s legacy of supporting our communities, operating safely and ethically and protecting the environment began long before our years of ESG reporting—it is embedded in our company values. Further, ESG is overseen at the highest levels of management: the board and executive leadership.

We strive to continually integrate our ESG Values of Safety and Quality, People, Environmental Sustainability, Governance & Ethics and Communities into our broader business strategy. We recognize that connecting all aspects of business strategy and sustainability drives long-term value for Greenbrier and all of our stakeholders.



Our ESG Approach (Cont.)

As the world and the rail industry further sustainability efforts, we see a unique and evolving landscape: While demand for the global transportation of goods increases, so do pressures to reduce the environmental impact of vital products and commodities.

Greenbrier and the broader rail industry are part of the long-term solution to this challenge.

Environment	Safety	Economy
<p>Rail is among the most sustainable ways to move freight across long distances, contributing only 1.7% of all transportation-related GHG emissions (AAR, 2023).</p> <p>The products Greenbrier develops are continually reviewed for sustainability enhancements, and we work to reduce environmental impact during each production stage.</p> <p>“ ...contributing only 1.7% of all transportation-related GHG emissions...”</p>	<p>Compared to trucks, rail sees 10 times fewer injuries and 50 times fewer incidents (Oliver Wyman, 2023).</p> <p>Greenbrier strives to continually introduce safety enhancements to our product line.</p> <p>“ ...10 times fewer injuries and 50 times fewer incidents...”</p>	<p>Freight railroads are critical to economic health. Freight railroads serve nearly every agricultural, industrial, wholesale, retail and resource-based sector of the U.S. economy. Freight rail delivers the finished goods or the components for these goods used by people every day (AAR, 2023).</p> <p>“ Freight railroads serve nearly every agricultural, industrial, wholesale, retail and resource-based sector of the economy.”</p>

Disclosure Frameworks

To guide our ESG efforts, we rely on several reporting standards and frameworks, including the TCFD framework, the International Financial Reporting Standards Foundation’s Sustainable Accounting Standards Board (SASB) standards for our industry and the United Nations Sustainable Development Goals (SDGs). Our continued efforts to advance Greenbrier’s approach to ESG reporting included:

- A review of the ESG priority issues
- Addressing new and existing goals and commitments
- Incorporating business strategy and Core Values (Safety, Quality, Respect for People, Customer Satisfaction) into Greenbrier’s sustainability strategy
- Enhanced TCFD disclosure (see [page 65](#))
- A continued commitment to UN SDGs (see [page 62](#))

ESG Audits

As mentioned in our 2022 report, Greenbrier’s Internal Audit team reviewed our ESG data relating to energy management, safety and materials sourcing. In fiscal year 2024, we will develop a scope for a third-party ESG audit to further validate our report data.



Materiality Assessment & Top ESG Priority Issues

We include feedback from stakeholders, including employees, investors and ESG rating agencies, to identify material topics covered in this report. Our future efforts will expand ESG reporting and strategy through additional stakeholder engagement.

We conducted Greenbrier's first materiality assessment in fiscal year 2021, engaging internal and external stakeholders in interviews. We identified and defined salient issues and topics for Greenbrier and incorporated the results into the content and structure of the 2022 ESG Report.

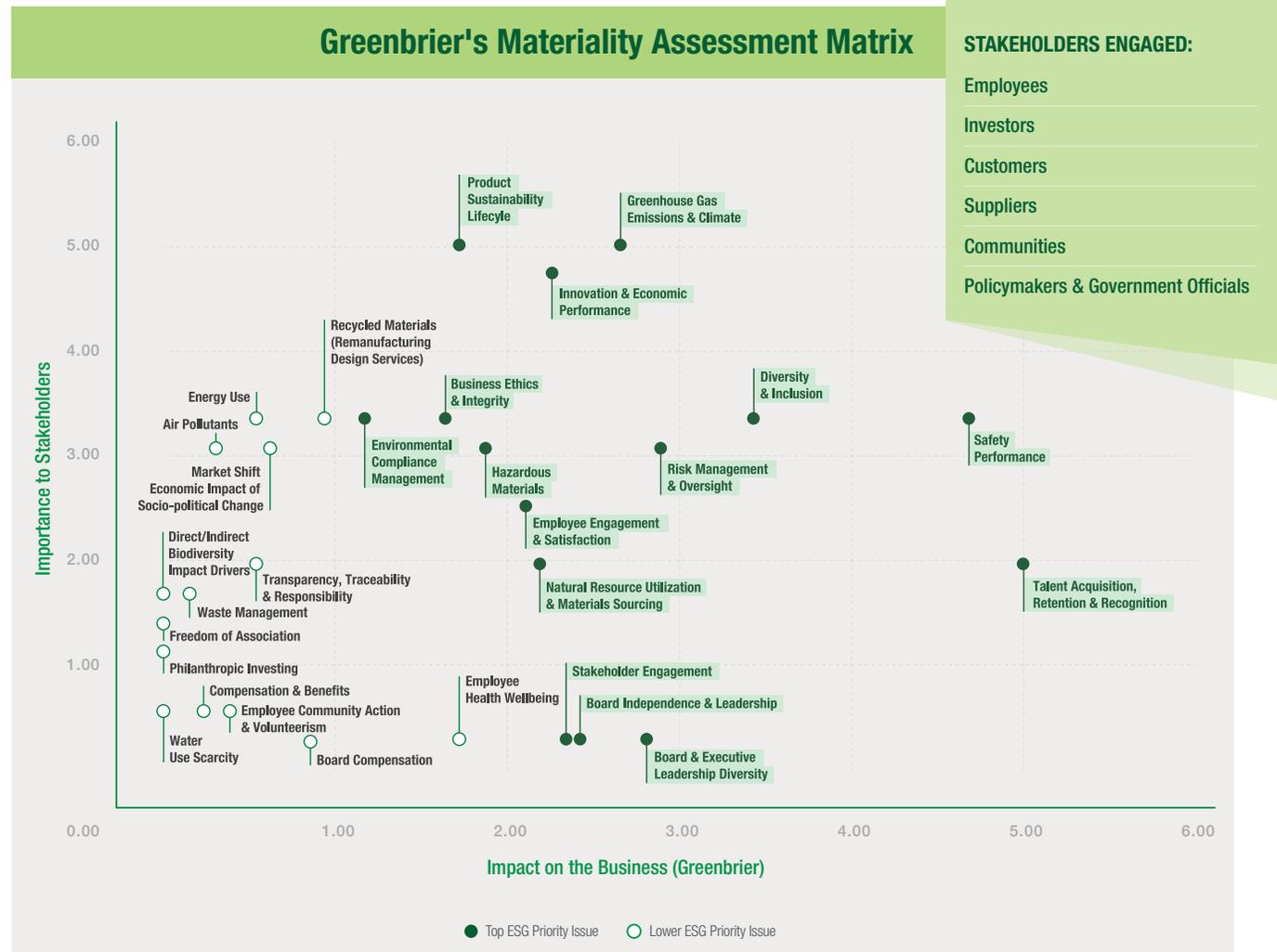
In fiscal year 2023, we reviewed our materiality matrix and identified the following as the highest-priority issues, consistent with prior years:

- Safety
- Talent Acquisition, Retention & Recognition
- Risk Management

Beyond these, Innovation and Economic Performance, Diversity & Inclusion and Greenhouse Gas Emissions & Climate were key focus areas at Greenbrier in fiscal year 2023.

As a key input to Greenbrier's ESG strategy, we intend to refresh the materiality assessment every few years with a review of the priority issues periodically.

See our [2022 ESG Report](#) for more details on our materiality assessment.



Stakeholder Engagement

We regularly engage with our stakeholders to develop solutions for environmental, social and business challenges and opportunities.

Our stakeholder groups include employees, investors, customers, suppliers, employees, regulators/government officials and community members. See our 2022 ESG Report for detailed industry engagement.

STAKEHOLDER GROUP	ENGAGEMENT ACTIVITIES	STAKEHOLDER PRIORITIES
 Employees	<ul style="list-style-type: none"> » Development and training opportunities » Employee engagement surveys » ERGs » Formal reward and recognition program launch » Quarterly newsletters » Quarterly town halls » Whistleblower/EthicsPoint process 	<ul style="list-style-type: none"> » Compensation and benefits » Development and career growth opportunities » Diversity, equity and inclusion » Recognition » Safe and healthy workplace
 Investors	<ul style="list-style-type: none"> » First-ever investor day in 2023 » Quarterly earnings-related conference calls » TCFD & SASB ESG disclosures 	<ul style="list-style-type: none"> » ESG incorporation into business » Long-term revenue and earnings growth potential » Sound governance practices
 Customers	<ul style="list-style-type: none"> » Answer ESG questionnaires » Customer surveys » Customized product development collaboration » Events and trade shows » Virtual Sample Railcar™ events 	<ul style="list-style-type: none"> » Engineering expertise » High-quality customer service » Product safety, quality and innovation
 Suppliers	<ul style="list-style-type: none"> » Active and open dialogue about collaboration opportunities » Regular risk assessments and audits » Supplier code of conduct expectations 	<ul style="list-style-type: none"> » Collaboration opportunities » Introduce sustainable products for Greenbrier use » Long-term relationships » Responsible consumption
 Communities	<ul style="list-style-type: none"> » Corporate Giving Committee coordination with local nonprofits » Volunteer Time Off (VTO) program 	<ul style="list-style-type: none"> » Healthy and vibrant communities » Partnership opportunities » Scholarships for underserved groups
 Policymakers & Government Officials	<ul style="list-style-type: none"> » Maintain Greenbrier Political Action Committee (PAC) » Regulatory and legislative advocacy » Volunteer service on Associate Advisory Committees of the Association of American Railroads (AAR), the Surface Transportation Board (STB) and Federal Railroad Administration (FRA) 	<ul style="list-style-type: none"> » Railcar quality » Rail safety and sustainability » Trade policy » Transparency in compliance reports



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59770

GBRX
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LD LMT 222000
LT WT 64000
CUFT 5800

CENTER FLOW

Safety & Quality



Employee Health & Safety

Health & Safety Management System

Training & Continuous Improvement

Product Safety & Quality

Product Innovation, Performance & Life Cycle

Supply Chain Engagement

Safety & Quality

Greenbrier is dedicated to our Core Values of Safety and Quality through our product development and production, and among our employees, customers and contractors. We continually review and enhance our workplace safety procedures, introduce product safety innovations and increase quality assurance efforts.

Our continued focus on safety and quality fosters a sense of trust among all our stakeholders and ensures consistent results each time a railcar rolls off the production line.

Employee Health & Safety

Safety is one of Greenbrier's Core Values, and we work directly with our employees to take steps to reduce workplace risks by improving working conditions, obtaining and using the correct tools and training rigorously to minimize workplace risks. We want every employee to return home safely to their families each day. Safety is a Core Value because our people are our most valuable asset.

In fiscal year 2023, we improved our already-strong safety culture with enhancements to the implementation of our EHS Policy and Dynamic Hand Safety Program.

Through additional safety audits at all our locations, we maintain an increased focus on high-risk activities, which help our employees recognize and mitigate safety risks before they become incidents.

Safety Performance

At Greenbrier, we believe that no one should be injured on the job. Our commitment to safety applies to all employees at every level of the company. Our Management Team receives safety updates every month. This is shared with our Board of Directors every quarter along with safety results, improvement efforts and policy rollout updates.

Greenbrier's commitment to improvement is demonstrated by the steady decrease in our recordable injury rate (IR) and our rate for injuries resulting in Days Away, Restrictions and Transfer (DART).



Employee Health & Safety (Cont.)

When it comes to safety at Greenbrier, **contractors and outside visitors** receive the same treatment as our employees:

1

Irregular or one-time visitors (for tours, inspections, etc.) receive an escort for direct oversight.

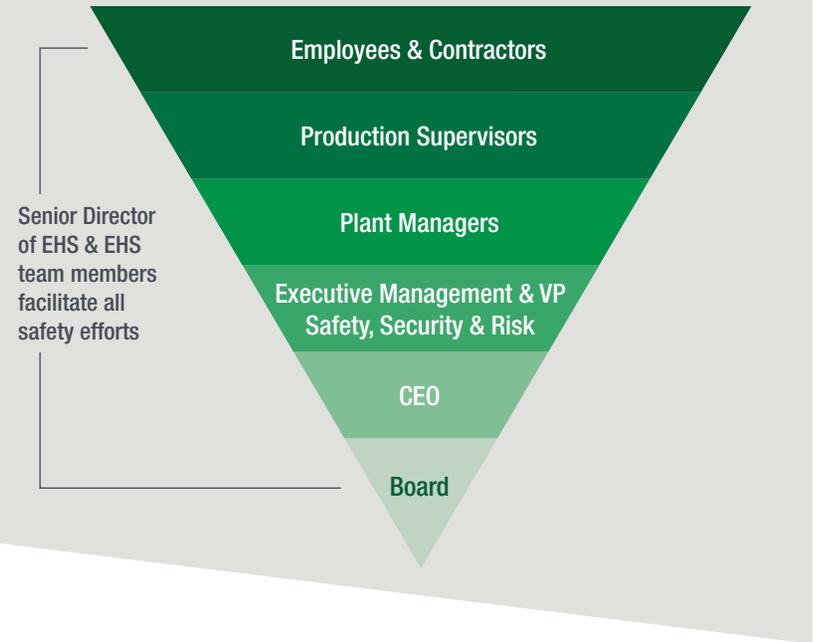
2

Regular visitors receive the same training as Greenbrier employees or must demonstrate equivalent training.

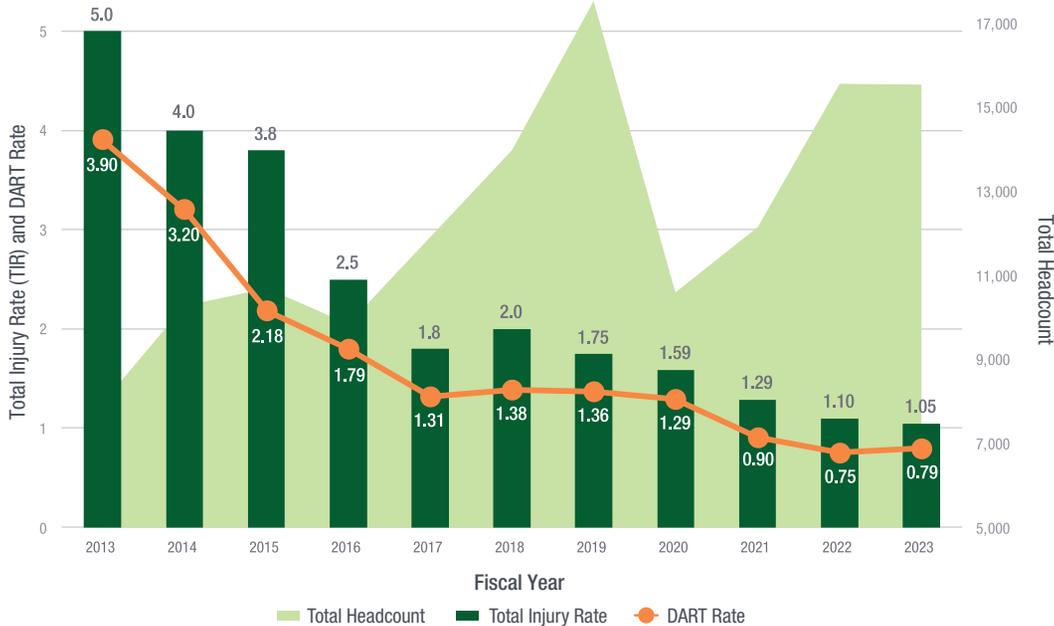
3

Onsite visitors, such as a construction company adding an additional building, receive reviews to ensure they operate under Greenbrier-approved safety protocols.

Safety is everybody's responsibility



IR, DART and Company Head Count by Year

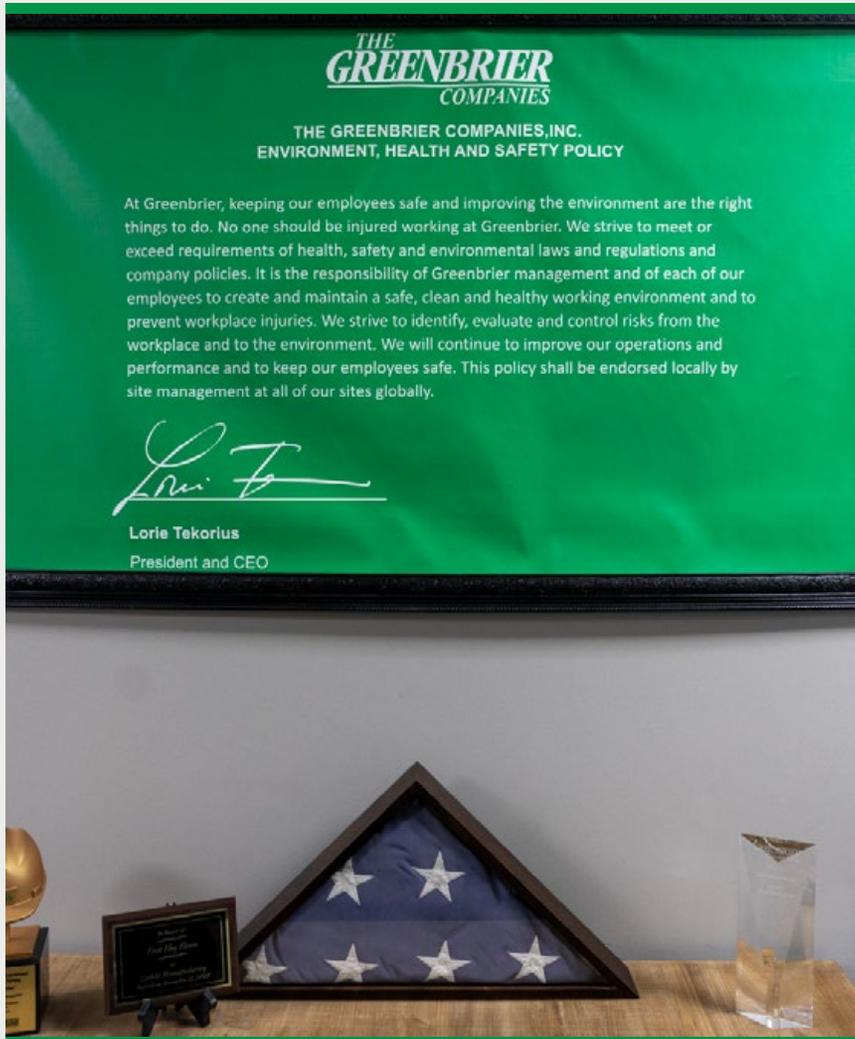


Metric	2022	2023	Improvement
Total Near Misses Tracked	1,668	1,808	8.4%
Near Miss Rate	11.03	9.84	-10.8%

An increase in reported near misses and the near miss rate is considered to be an improvement and best practice for companies with mature safety programs. In fiscal year 2023, we increased our near miss reports, but due to above average production levels, hours increased at an even higher percentage. This led to a slight decrease in our near miss rate.

Health & Safety Management System

In fiscal year 2023, Greenbrier comprehensively rolled out the Environment, Health and Safety (EHS) Policy. We used several communication platforms and prominently display this policy at all Greenbrier production facilities.



Corporate Safety Manual & Audits

Corporate EHS staff are auditing Safety Manual implementation at the facility level to ensure conformance. Approximately 90% of employees are covered by the Corporate Manual (ISO 14001-equivalent) and 10% of employees receive coverage by a third-party safety certification.



As mentioned in our 2022 ESG Report, we audited seven manufacturing facilities with plans to audit an additional seven in the following year. In fiscal year 2023, we exceeded this goal by completing safety audits at eight production facilities. These audits reviewed activities including:

- Working at heights
- Confined space entry
- Handling suspended loads
- Machine guarding

Opportunities for improvement were identified and have either been implemented or are in progress.

Training & Continuous Improvement

Greenbrier started two continuous improvement projects in fiscal year 2023:



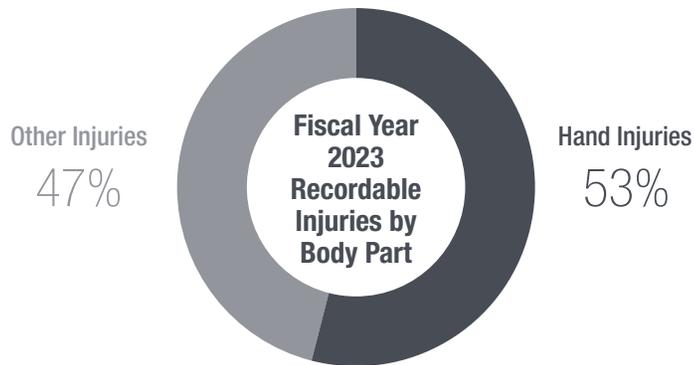
Training Type	Frequency
Onboarding	Upon hiring (PPE, general safety rules and regulations, Greenbrier expectations, job-specific training/certifications)
Ongoing	Job-specific retraining, periodic issues
Periodic	As required by law
Contractor/vendor	Ongoing

Training was rolled out to 100% of the production facilities, as required by Greenbrier policies and local laws and regulations.

Dynamic Hand Safety Improvement Program

Greenbrier prioritizes hand safety because it is our most prevalent type of injury. Risks of hand injuries can go unnoticed, as they generally happen while an employee is in motion. Static risks are easier to identify, like spotting pinch points on a rolling machine.

Hand injuries comprised more than half of total injuries in fiscal year 2023. We have prioritized hand safety for several years and were beginning to see a plateau in improvement. This led us to consider a new approach using innovative risk-reprogramming techniques.



Total recordable injuries for fiscal year 2022. Data is derived from Intelix, Greenbrier's online integrated Environmental, Health and Safety database.

Improvements in tracking injuries and near-misses over the last few years allowed us to identify the need for the Dynamic Hand Safety program.

Using the data from our integrated EHS Information Management System, we analyzed company-wide injury data trends to understand common causes of hand injuries.

ISSUE

We found that our employees' safety would be better served by focusing on specific tasks that pose safety risks, in addition to monitoring objects on the worksite.

The term Dynamic Hand Safety represents the movement and arrangement of materials and positioning and use of hand tools that most often result in hand injuries. The challenge for Greenbrier:

- Much of our work is manual and difficult to automate due to steel properties (size and thickness)
- Our products maintain complex shapes and angles

SOLUTION

To improve our ability to spot these complex risks, and increase situational awareness, we introduced the Dynamic Hand Safety Program to prioritize identifying the "transitions" where pieces are moved in or out of a workstation, or pieces are moved or modified together.

We believe that over time, this program will reduce hand injuries that occur when two metal objects come together in an unintentional way, in a routine situation that is perceived as being safe. The process uses a technique to reprogram how the worker recognizes a high-risk area.

Employees already note the benefits of the process.



“ My welders and fitters in the underframe assembly area have started using the Dynamic Hand Safety program. Their attention to safety has increased since implementing the program.

Simona Ruzici
Production

“ Here at Greenbrier Maxion we work hand in hand with safety!

Management plays an important role in actions that contribute to improving the working conditions and safe behavior of our employees.



At Manufacturing we are attentive and practice Dynamic Hand Safety. We know the importance of this fundamental tool, because the same hands that produce the wagons are the hands that will give affection to our family members.

We rely on everyone at Greenbrier Maxion to provide a pleasant and safe work environment. Proud to be part of Team GBMX!”

Jefferson Santos da Silva
Leader of Production

Product Safety & Quality

Safety and Quality are at the forefront of our product development efforts. High-quality work results from implementing leading safety practices as we continuously improve our processes to generate new equipment and services.

In fiscal year 2023, we continued to manage and control product safety and quality through training, policy and regulatory compliance, performance audit, risk assessments and process enhancements.

Greenbrier is committed to providing safe products and services that meet required standards and customer expectations through continuous improvement of our quality program. This is demonstrated by Greenbrier’s long-standing Quality Policy.

The Greenbrier Manufacturing Quality Assurance Manual is used to meet or exceed the requirements of the AAR M-1003 Specification for Quality Assurance, M-1002 Specification for Tank Cars and DOT CFR 49.179 & 180.55 Specification for Tank Cars as well as ISO 9001:2015. The Quality Manual applies to all North American Greenbrier facilities and was signed off by senior management. The Quality Assurance Manual is supplemented by detailed Quality Procedures, Forms and Standards. All North American new railcar manufacturing facilities are also Kosher Certified by the Union of Orthodox Jewish Congregations of America. This means the process of building Greenbrier food-grade railcars meets kosher standards.

Location	Facility	Certification(s)
United States	Greenbrier Marmaduke	AAR M-1003, AAR M-1002
	Greenbrier Paragould	AAR M-1003
Mexico	Greenbrier GIMSA	AAR M-1003, AAR M-1002
	Greenbrier Sahagún	AAR M-1003, ISO 9001
	Greenbrier Tlaxcala	AAR M-1003, AAR M-1002
Poland	Greenbrier Wagony Świdnica	TSI Module SD, ISO 9001, ISO 14001, ISO 18001, ISO 45001
Romania	Greenbrier AstraRail (Arad, Drobeta-Turnu Severin, Caracal)	ISO 9001, TSI Module SD, ISO 14001
Turkey ¹	Greenbrier Rayvag	ISO 9001, TSI Module SD
Brazil	Greenbrier Maxion	ISO 9001, ISO 14001, ISO 45001

¹ In August, we exited Rayvag, our joint venture in Turkey, with a sale to our minority joint venture partner.

Product Safety & Quality (Cont.)

Quality Planning

Each new railcar order receives a Quality Plan, which identifies the specific railcar's critical quality characteristics, its subassemblies and components, and the method of verification to be applied to each. For each production order, a cross-functional team performs a formal first piece verification and approval process on all critical subassemblies and completed railcars. The process helps assure that the product meets applicable requirements and that the required equipment and documentation are in place in the work center.

Facility Performance

Greenbrier maintains rigorous quality performance monitoring and tracking at each facility across our network. We established a cross-functional team that performs a formal process for continuous improvement activities, investigates incidents and provides corrective action processes as needed.

Supplier Quality System

Greenbrier has an established process for the selection and use of suppliers based on their ability to meet purchase order and quality requirements. The supplier selection and monitoring process is cross-functional and includes Purchasing, Quality Assurance and Engineering. We audit key suppliers annually.

We hosted **21** supplier audits in fiscal year 2023.

Greenbrier's QA team enabled **eight facility audits** in fiscal year 2023.

Quality System Auditing and Process Auditing

Quality Assurance conducts annual internal Quality System Audits in each manufacturing facility. Critical processes are targeted for formal Process/Product Audits, which are conducted by Corporate Quality Assurance. We maintain a standardized approach for conducting audits, tracking audit observations and corrective actions.

Product Safety & Quality (Cont.)

We hosted **69**
weld audits in
fiscal year 2023.

Weld Engineering Group

Our Weld Engineering Group standardized weld procedures and welding processes across all facilities and provides technical support and training to our manufacturing facilities. The Weld Engineering Group conducts periodic Welding Program Audits in each manufacturing facility.

Training

All new employees receive quality program training during onboarding. We also schedule recurring quality and technical training for employees.

In fiscal year 2023, Greenbrier established the Technical Services–Center of Excellence

Our leadership team recognizes the need to standardize the company's quality procedures, processes and practices associated with our operations in railcar manufacturing, parts, fabrication, maintenance, repair, reconditioning and management. This consists of specialized business methods that support machining, assembly, weld engineering, protective coatings and non-destructive testing activities (“Technical Services”). The Technical Services–Center of Excellence is responsible for working with each business unit to develop standardized technical services to the highest level of product quality. It also focuses on the efficient and proficient use of resources and minimizes business risk to support Greenbrier’s needs.

Product Innovation, Performance & Life Cycle

Greenbrier products support a virtuous cycle of sustainability in the broader economy. Our products are designed to withstand heavy-duty operating conditions and to be refurbished and reused for multiple life cycles. This reduces the need for raw material extraction and associated GHG emissions. **Our railcars are designed to last up to 50 years and are approximately 95% recyclable at end-of-life.**

Greenbrier works directly with our customers to solve their transportation needs, whether our customer is buying new products, sustainably converting existing products or seeking to outsource railcar maintenance or management.

We derive market research and deep customer relationship insights for new product and services developments. These conversations have informed notable innovations, including products such as Greenbrier's Advanced High-Strength Steel Gondola™ and our Tsunami Automated Hatch™. Marketing and engineering personnel collaborate to evaluate opportunities and develop new products and services that exceed our customers' expectations. **We have spent more than \$15 million in research and development (R&D) over the last three fiscal years (2023 Annual Report).**

Learn more about product innovation and engineering expertise at Greenbrier:

History of Innovation



▶ Click to watch the video



▶ Click to watch the video





Product Innovation

Greenbrier has introduced upgrades to many railcar types over time, with enhancements to a combination of environmental, quality and safety benefits.

Gondolas

High-Stength Steel Gondola™

In fiscal year 2023, Greenbrier built 800 Advanced High-Strength Steel Gondolas™ as part of the Norfolk Southern-U. S. Steel Partnership. The gondolas were developed over multiple stages with increasing durability and lighter steel each time.

Gondola railcars are used to transport commodities from a variety of industries, including mining, lumber, steel, agriculture and more.



1	PHASE	Advanced High-Strength Steel Gondola™	6,000 pounds of steel saved per railcar	8.8% lighter than standard gondolas with increased durability
2	PHASE	Ultra-High-Strength Steel Gondola™	15,000 pounds of steel saved per railcar	22.2% lighter than standard gondolas with significantly increased durability

Product Innovation, Performance & Life Cycle (Cont.)

Covered Hoppers

Grain Hoppers

Our covered hopper products offer a variety of environmental product safety innovation enhancements.

Bigger



Shorter



Sustainable Conversions

Our Sustainable Conversions are an efficient, environmentally sustainable and cost-saving option for railcar owners looking to diversify and optimize their fleets.

We offer rebody, stretch and auto carrier conversions programs as part of the Sustainable Conversion offerings, which converts existing covered hoppers and tank cars and is often able to reuse many existing components to reduce the overall cost.

Rebody Conversions



Rebody Conversions reclaim and reuse specialty components such as trucks, wheels, axles and brakes. Scrapped steel from the railcar bodies is recycled at the end of the railcar's lifespan (see [page 45](#)).

Tsunami Automated Hatch™

Greenbrier's Tsunami Automated Hatch™ was developed for covered hoppers.

Enhance Worker Safety & Satisfaction



The National Grain & Feed Association estimates six injuries from falls per year. According to OSHA, the costs of injuries and fatalities per fall range from \$70K to \$9M.²

This innovative system eliminates the need for loading personnel to climb a covered hopper before, during or after loadings.

Improves Terminal Efficiency



Saving up to **16 hours** on a 100-railcar train

Over **\$1 million** in labor savings annually

Lighter & More Aerodynamic



Wind average drag area of the Tsunami railcar is **13.4 square feet**

Allows for **greater payload** and **fuel savings** through the elimination of running boards

Stretch Conversions



Stretch Conversions use approximately 65% less steel versus newly built ones. In fiscal year 2023, Greenbrier's 344 total Stretch Conversions resulted in only **258 total tons of scrapped (recycled) steel**.

² "Walking-Working Surfaces and Personal Protective Equipment," OSHA, 11/18/2016. NGFA survey of 901 facilities showed that during a two-year period (2007-09), during which the facilities handled 1.5 million railcars and 1.4 million motor vehicles, no fatalities and only 12 injuries from falls occurred (Ex. 148)

Product Innovation, Performance & Life Cycle (Cont.)

Product Life Cycle & Circular Economy

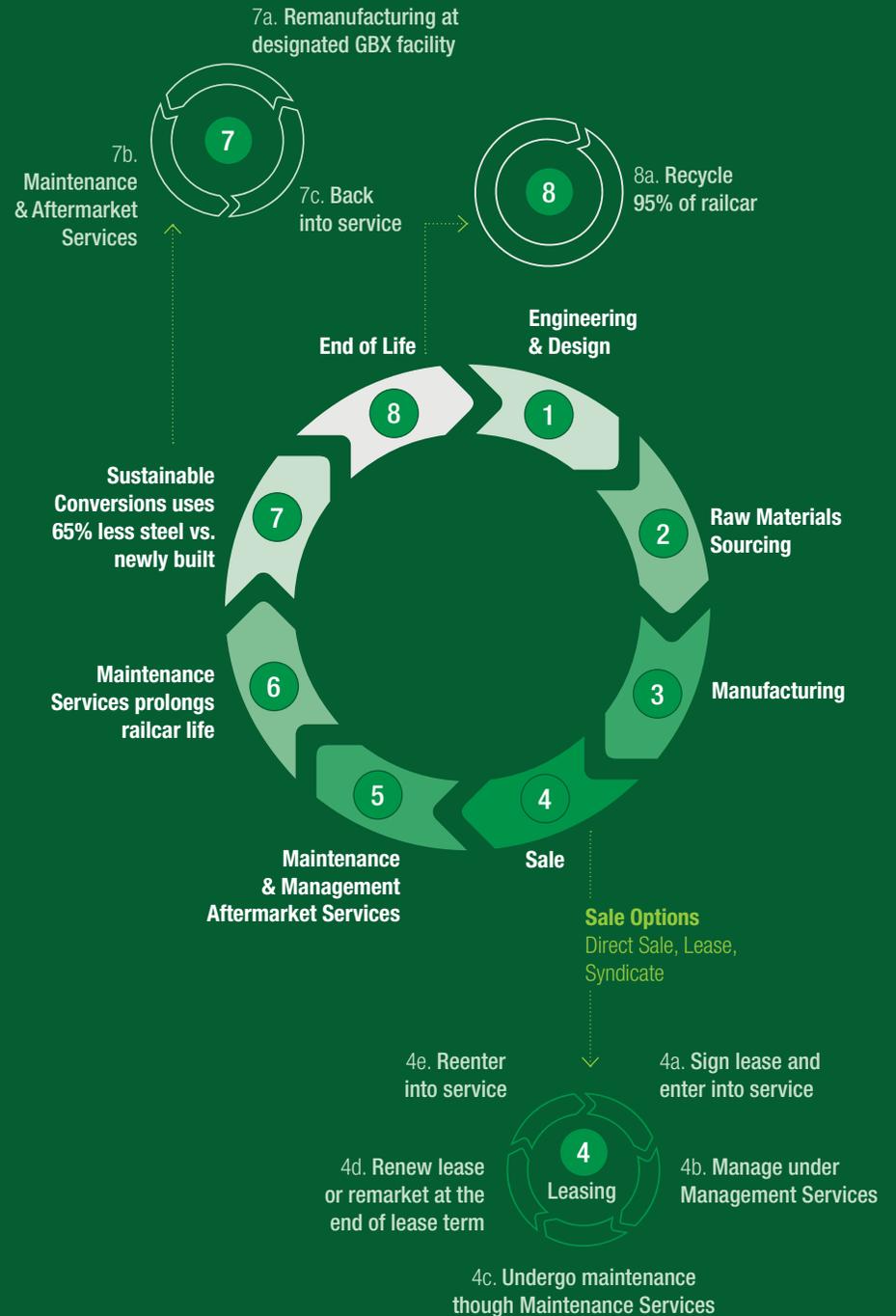
Environmental impact considerations occur systematically throughout the product creation process. During the design phase, we engineer with material savings and higher efficiency in mind. When we use fewer materials, we produce less waste and provide more space in each railcar for product delivery.

When we use more efficient and durable materials, the railcars require less maintenance and maintain a longer life cycle before being recycled at end-of-life. In addition, our integrated model allows for high-quality and reliable services offerings outside of new railcar production.

Greenbrier's approach toward product sustainability and materials sourcing is to move materials more efficiently over land. We are committed to developing products that best serve our customers and the freight rail industry at large through product stewardship, engineering expertise, R&D and production process enhancements. We demonstrate our commitment through:

- Engineering railcars with lower tare weight (the weight of a railcar with no contents)
- Minimizing steel use and using recycled contents when possible
- Purchasing steel from vendors near our production facilities when possible, saving transportation costs and emissions
- Developing more durable, long-lasting products
- Increasing aerodynamics, with the potential to increase fuel savings of 6% or greater
- Enhancing worker and shipment safety features
- Continually introducing quality enhancements as they become available

This approach drives value for our customers, the railroads and the environment.



Supply Chain Engagement

Greenbrier engages with our supply chain to support product safety and quality, environmental sustainability and ethical business dealings. We seek opportunities to engage with diverse-owned businesses when possible.



Supplier Code of Conduct

Greenbrier's Supplier Code of Conduct includes policies related to responsible business expectations. In addition to the Supplier Code of Conduct, our vendors must also comply with our policies below, which can be found on our [website](#):

- California Transparency in Supply Chains Act Statement
- Coercive Labor Practices Policy
- Corporate Social Responsibility Policy
- Human Rights Policy

We expect our suppliers to embrace sound business practices, follow the law, adhere to environmental compliance requirements, conduct appropriate labor practices, provide acceptable living conditions, follow legal and appropriate disciplinary practices and provide fair minimum living wages and maximum working hours.

Supply Chain Risk Management

Greenbrier's procurement team works to mitigate risks related to supply chain and global sourcing. As described in our Annual Report, risk factors include:

- Business, regulatory or legal developments related to climate change that may impact suppliers
- Increased cost of goods
- Limited supplier base
- Supply chain disruptions

Greenbrier has taken action to mitigate these risks by identifying additional suppliers. Additionally, as described in our Better Together Strategy, we will increase our insourcing capabilities for manufacturing railcar components that we historically outsourced.



Supply Chain Engagement (Cont.)

Supplier Selection Process, Requirements and Audits

Our suppliers meet required certifications including AAR, American Society for Testing and Materials (ASTM) and Greenbrier’s own stringent quality standards. We hosted 21 QA Supplier Audits this year. If suppliers fail to comply with Greenbrier’s requirements, we address the situation accordingly. Remedial actions can include a spectrum of scenarios, with the most severe being discontinuing our business relationship with the supplier.



Supplier Diversity Program

Building a more inclusive supply chain is a key ambition for Greenbrier. Sourcing that supports diverse businesses brings new perspectives and capabilities to our business. In fiscal year 2023, Greenbrier developed a strategy committee to address our goal of determining successes and gaps in our vendor selection approach.

The group will use this information to develop the next steps in a Supplier Diversity Program, including:

- Discussing a vendor survey to track supplier diversity
- Working with leaders to develop a process that supports an inclusive program

Successes	Gaps/Challenges
Customers and investors express interest in Greenbrier maintaining a supplier diversity program and providing metrics to support their own programs	Limited Tier 1 supplier base for manufacturing materials
Several corporate departments informally began requesting vendor diversity information	The need for a single source diverse vendor tracking mechanism for reporting vendor diversity metrics
Senior management and the Board of Directors have signed off in support of our Supplier Diversity Statement that is included in our Supplier Code of Conduct	Implementing a standardized Request for Proposal (RFP) process across business units



Our People



Human Capital Management
Attracting Talent
Retaining & Developing Our People

Employee Engagement
Compensation & Benefits
Diversity & Inclusion

Our People

Greenbrier strives for success. We do this by investing in our people, providing exceptional value to our customers, supporting the communities where we serve and, ultimately, delivering strong financial returns to our shareholders.

Human Capital Management

Building a successful human capital management (HCM) strategy requires foresight, commitment and a willingness to embrace change. Greenbrier and our Board of Directors are committed to creating a culture of feedback and inclusion that supports our IDEAL commitment and reinforces our Core Value of Respect for People.

Greenbrier’s approach to human capital management begins during recruitment and continues throughout employment.

We actively recruit diverse talent, internally and externally using interview processes designed to limit bias and ensure we hire qualified candidates.

Our onboarding program provides a comprehensive and inclusive experience for new employees.

We provide professional development opportunities through training, leadership development programs and ERGs.

The average tenure of our global workforce speaks to Greenbrier’s unwavering commitment and investment in our people.



U.S. Employees by Seniority³

Employees by Country³

53% < 5 years	52% Mexico
15% 5–9 years	15% United States
11% 10–14 years	14% Romania
9% 15–19 years	11% Brazil
12% 20+ years	7% Poland
	1% Turkey

³ In August, we exited Rayvag, our joint venture in Turkey, with a sale to our minority joint venture partner. The remaining numbers are as of August 31, 2023.

Attracting Talent

Greenbrier seeks to be an employer of choice. We are committed to innovation and continuous improvement in all areas of our business.

We work with employer diversity organizations, such as the League of Railway Women (LRW), Partners in Diversity (PiD) and the Manufacturing Institute, a subset of the National Association of Manufacturers (NAM). With our IDEAL recruitment process in place, we focused on enhancing the new hire experience by reinventing our approach to employee onboarding.

In fiscal year 2023, we successfully deployed the onboarding framework across our United States operations. Our new program spans the employee's pre-hire period through the employee's first 90 days of employment. Today, onboarding at Greenbrier equips employees and managers with information and tools to guide them through successful integration. It also establishes ongoing connections to encourage a culture of open dialogue early in the employment cycle.

As described in our [Communities section](#), Greenbrier continually looks to increase collaboration with historically Black colleges and universities (HBCUs), apprenticeship programs, community colleges and second chance hiring.

Greenbrier's facilities in Arkansas and Missouri have a long-term partnership with a local technical school, Black River Technical College (BRTC). Welding is an important skill set, particularly in the industrial area around the college. Training with BRTC leads the students toward a successful future at Greenbrier and in the broader region of Greene County, Arkansas. The scope of Greenbrier's partnership with BRTC

is broad and includes some of the following cooperative benefits:

- Greenbrier hires many graduates in a variety of positions directly after graduation.
- BRTC opened a career tech center for Clay County High School students.
- Employees from Greenbrier teach classes at the tech center on subjects such as welding, maintenance and electrical work.



IDEAL Onboarding Program

PRE-HIRE	Warm Welcome
	<ul style="list-style-type: none"> • What to expect on the first day • Introduction to company culture, values and IDEAL commitment
DAY ONE	Thoughtful Introduction
	<ul style="list-style-type: none"> • Navigating Greenbrier – getting started, what you need to know, where to go with questions • Workgroup/team introductions • Equipment/resources needed for role
WEEK 1	Organized Integration
	<ul style="list-style-type: none"> • Facility tour • Scheduled meet and greet activities • Expectation setting, role clarity
30-60-90 DAYS	Ongoing Connection & Communication
	<ul style="list-style-type: none"> • Regularly scheduled check-ins/connection points • On-the-job training • Dissemination of information • Additional resources/training needs identified

GOAL



In fiscal year 2024, we plan to measure the effectiveness of the IDEAL onboarding program by launching a survey at the conclusion of the first 90 days of employment. We expect the results to provide valuable insights to continually improve the program.

In addition, we plan to introduce an enhanced safety onboarding approach that provides a comprehensive and consistent framework across our North American operations.

Retaining & Developing Our People

Greenbrier understands that our continued success comes from our ability to attract, develop and retain a skilled workforce, as well as foster an environment where people feel connected, engaged and motivated to carry out the company's vision and goals.



Learning & Training

Greenbrier strives to create an environment that promotes access to learning and training opportunities for employees. At all levels of the organization, we encourage and reinforce the importance of learning new skills and competencies through a number of training opportunities.

Greenbrier University

We developed Greenbrier University (GBU) in fiscal year 2022 and continue to expand its content based on business needs and employee skill sets. The courses focus on behaviors and skills that are important for employment success.

1,603 GBU training hours in fiscal year 2023.

On-the-Job Training

On-the-job training includes hands-on learning, job shadowing, stretch assignments and job rotation opportunities.

Training is available to current employees and new hires. We frequently recruit and hire individuals with limited or no technical skills, then train them to serve in highly skilled production roles. We also prioritize safety training every step of the way.

Continuous Improvement

In fiscal year 2023, Greenbrier began a companywide Continuous Improvement Training initiative. The purpose of the program is to train and empower our teams to solve problems and make improvements together, with a common language and framework.

1,600 Continuous Improvement training hours in fiscal year 2023.

Online Learning Opportunities

Employees can access a number of online resources for self-paced learning through programs such as LinkedIn Learning.

439 Greenbrier employees are registered for LinkedIn Learning.

Leadership Development & Succession Planning

Succession planning is more than replacement planning. It is developing a strong talent base that provides a pipeline to grow our organization beyond what it is today. This includes having a clear picture of our talent across the organization, facilitating career conversations, creating growth paths and opening doors to make room for others.

We facilitate leadership development across all geographies in support of succession planning and building a strong talent pipeline for the future.

Employee Engagement

We know from employee feedback that communication and recognition are key drivers that contribute to people feeling connected and engaged.

Feedback from our recent employee surveys in the U.S. and Mexico led us to develop communication and recognition opportunities to accomplish the following:

- Sharing company news, upcoming events, activities and initiatives
- Connecting with and congratulating co-workers for life and work events
- Recognizing and celebrating great work being done around the company

To measure progress, we intend to continue to solicit input and insights from employees, including through additional employee surveys. We take employee feedback seriously and review the results and common themes when deciding which programs to introduce in the future.

Employee Survey Participation



The survey included questions about IDEAL and Greenbrier’s Core Value of Respect for People. The results in both geographies demonstrated that employees are comfortable bringing their true selves to the workplace and are respected as individuals.

Employee Communication Platform: GBX RailDepot



In fiscal year 2023, Greenbrier met our goal to establish a recognition and reward program through the launch of GBX RailDepot. This is an online communication platform for connecting people and information. Employees can view information about the company, access employee resources and recognize others for their contributions.

Greenbrier’s recognition program, GBXcellence, lives in GBX RailDepot. It provides the opportunity to formally recognize individuals and teams that exhibit Greenbrier’s Core Values and IDEAL principles, go the extra mile and celebrate employee milestones and life events.

GBX RailDepot and GBXcellence are a direct result of feedback received during the March 2022 Employee Survey, in which employees shared that they would like more visibility to what is happening across the organization and more opportunities for recognition.



GOAL  In fiscal year 2024, we plan to bolster our employee feedback loop by launching a formal exit survey, conducting a follow-up employee survey in the U.S. and Mexico and launching an initial employee survey in Europe.

Compensation & Benefits

It is essential to demonstrate our commitment to employees throughout all stages of their careers. Greenbrier performs market research to ensure our wages, benefits and incentive compensation programs remain competitive in all areas where we operate.

Compensation

We regularly evaluate our compensation programs. This includes reviewing base pay levels for equity both internally and externally and assessing the effectiveness of our short and long-term incentive programs. We adjust our compensation programs to reflect the current marketplace for similar positions at comparable companies. Our incentive programs are designed to motivate employees to meet and exceed our operating and financial performance goals. Additionally, in our business units, individual employee performance factors into incentive compensation. For example, in our Maintenance Services unit, employee attendance is a component of incentive compensation.

Benefits⁴

Benefits programs are a key differentiator in attracting and retaining talent. We strive to provide competitive health and wellness programs that meet the diverse needs of our employees and their families.

- ✓ **Employee Assistance Program:** Employees and their families can take advantage of backup dependent care, free legal assistance, counseling sessions and more.
- ✓ **Employee Stock Purchase Plan:** Employees are able to purchase company stock at a discounted price.⁵
- ✓ **Flexible Work Arrangements:** For those in positions where remote work is a viable, flexible option and the position is suited to such an arrangement.
- ✓ **Health & Wellness Resources:** Support and resources for employees and their families as they make proactive decisions about their health.
- ✓ **401(k) Plan:** Greenbrier provides a generous match for employee contributions.
- ✓ **Income Protection:** Free or low-cost insurance and disability coverages to support approved leaves of absence.
- ✓ **Medical, Dental & Vision Coverage:** High-quality medical, dental and vision options are available for the whole family.
- ✓ **Paid Time Off:** A combination of sick and/or vacation time that accrues above state requirements, as applicable.
- ✓ **Tuition Assistance Program:** Tuition reimbursement is available for approved educational programs and expenses.

Greenbrier Manufacturing Operations

6,000 employees are represented by a union

In Manufacturing, approximately 6,000 employees are represented by unions, primarily in Mexico and Europe. At our Maintenance Services locations, approximately 50 employees are represented by a union. We are a party to collective bargaining agreements with various labor unions at some of these operations. We believe we have good union relations.

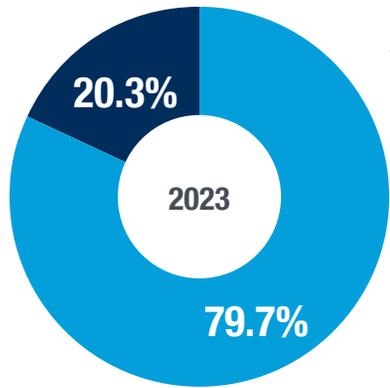
⁴ We offer competitive benefits in all geographies where we operate. However, benefits such as health insurance vary by geography because many countries offer universal healthcare.

⁵ This is available to all United States employees.

Diversity & Inclusion

In fiscal year 2023, Greenbrier's progress on our IDEAL journey accelerated as we transitioned our approach from building awareness to action. Leadership support and high employee engagement will be critical as we advance Greenbrier's IDEAL goals and mission. Through ongoing training, a culture of feedback and employee support, we will continue to champion our commitment to IDEAL.

U.S. Workforce Representation



U.S. Gender Diversity

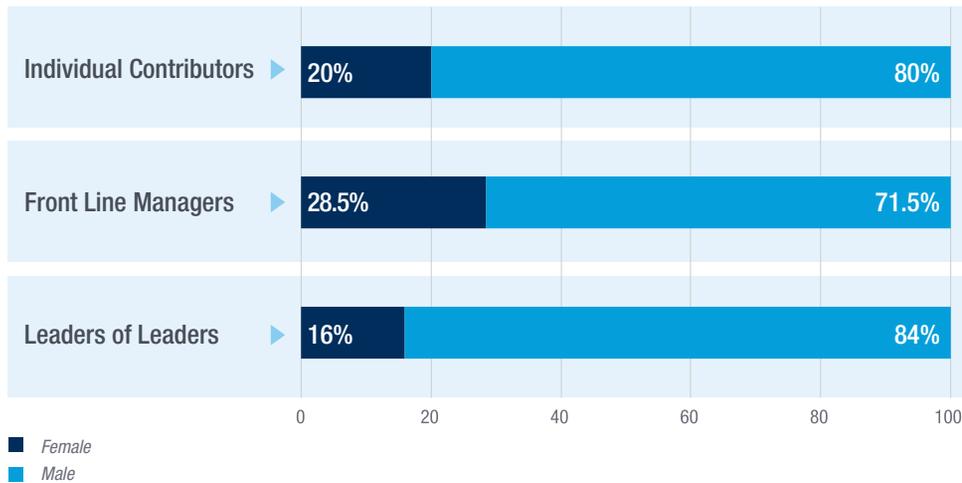
Greenbrier's female workforce representation increased to 20.3% in fiscal year 2023, up more than 2.3% from 18% female in fiscal year 2022.

■ Female
■ Male

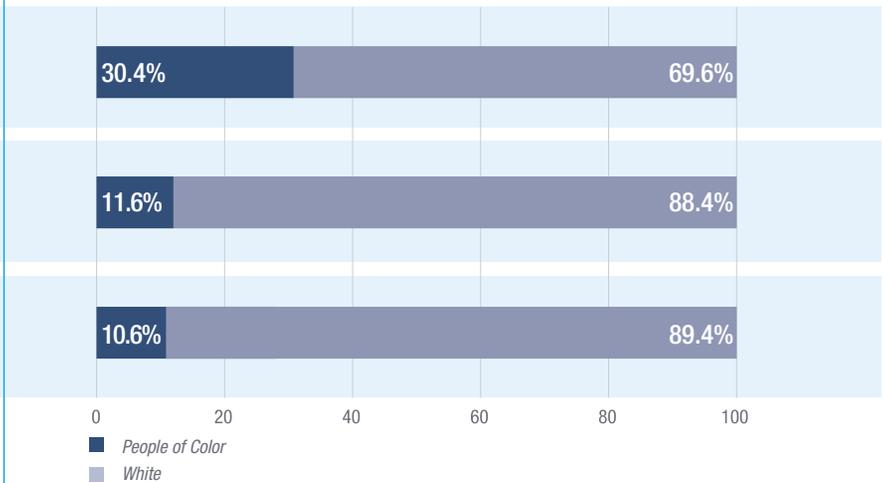
U.S. Racial/Ethnic Diversity

	2021	2022	2023
White	72.0%	69.7%	72.0%
Hispanic/Latino	14.4%	16.7%	15.9%
Black/African American	7.0%	7.1%	8.0%
Asian	4.7%	4.6%	1.7%
Two or More Races	0.9%	0.9%	1.4%
American Indian/Alaska Native	0.6%	0.6%	0.6%
Native Hawaiian/Other Pacific Islander	0.4%	0.4%	0.4%

U.S. Gender Diversity by Management Level



U.S. Racial/Ethnic Diversity by Management Level



Diversity & Inclusion (Cont.)

Employee Resource Groups (ERGs)

In our 2022 ESG report, we set a goal to continue supporting and growing employee networks—Site Action Committees (SACs) and ERGs. We are proud of our progress in supporting these groups.

ERGs are designed for employees to stay connected to Greenbrier and network with coworkers. They provide accessible tools and resources across the organization. ERGs enhance cultural awareness, foster a sense of belonging and support Greenbrier’s commitment to inclusion, diversity, equity, access and leadership, while improving company culture for everyone.

SACs consist of employees from each business unit to promote and manage local IDEAL-related projects and activities at their specific locations and those nearby. These activities connect to Greenbrier’s broader business-driven IDEAL strategy.

Our SACs and ERGs collaborate to extend learning opportunities, support holidays and awareness days, ERG membership and more. Working across groups supports inclusion. It is essential to our IDEAL commitment that employee-led groups work together and enhance company culture.

300
members

Greenbrier has a total of eight ERGs consisting of more than 300 members from our U.S. workforce.

The African American ERG partnered with our Arkansas/Missouri Site Action Committee to provide education and awareness around Black History Month, the significance of observing it and ways to better support underrepresented employees and communities. This presentation reached 800-plus production employees.



Diversity & Inclusion (Cont.)

Employee Resource Groups (ERGs)



Fiscal Year 2023 Highlight: The African American ERG invited a guest speaker to host a session on leadership and resume building. This session provided advice and guidance on career journeys and developing resumes.



Fiscal Year 2023 Highlight: The Emerging Leaders ERG invited their members and executive leadership to a networking event. This successfully provided members the opportunity to meet executive leaders from across the organization and ask for career advice.



Fiscal Year 2023 Highlight: The GBXCels Women's Leadership ERG hosted Lida Citroën, Executive Coach and Personal Branding expert, to share career development tools. Lida also offered guidance on how to build and promote your personal brand, including leadership presence, to gain career success.



Fiscal Year 2023 Highlight: Hosted a representative from the Disabled American Veterans (DAV) to share the services the DAV provides to veterans. The group also shared valuable information about the benefits veterans can access once separated from service.



Formed in fiscal year 2023, the Hispanic ERG's mission is to promote cultural diversity, education and professional development of its members and to foster a supportive environment for Greenbrier's Hispanic community.



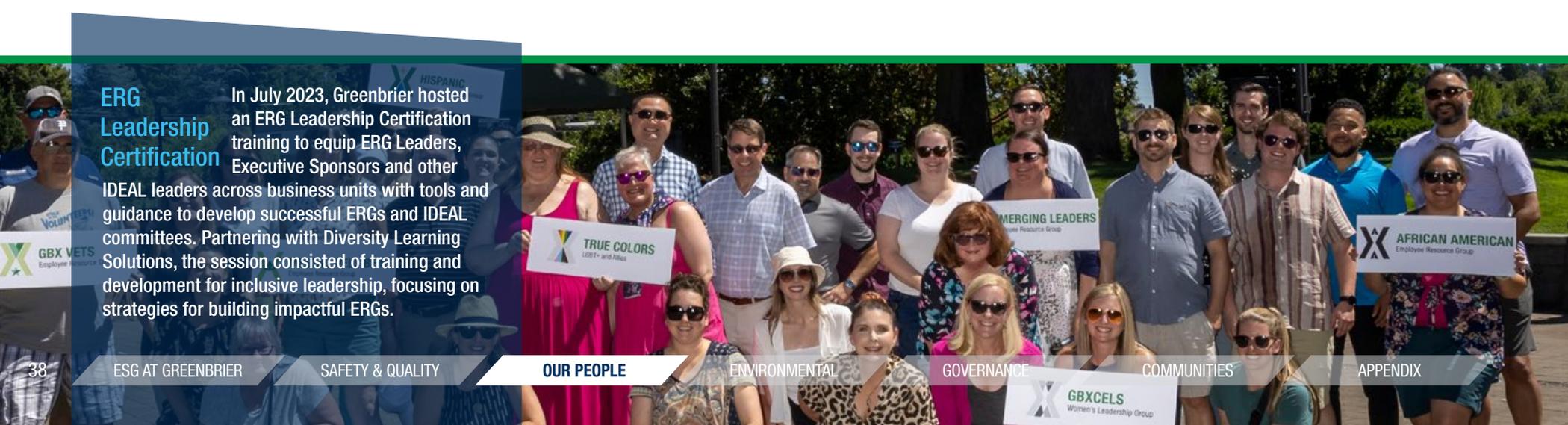
Fiscal Year 2023 Highlight: The Mental Well-Being ERG invited Lines for Life, a social services organization, to speak on the importance of mental health, signs of individuals struggling with mental health and the need to acknowledge and eliminate social stigmas around mental health discussions and assistance programs.



Formed in fiscal year 2023, the Second Chance ERG strives to equip formerly incarcerated and rehabilitated employees with the education and resources needed to grow in their careers.



Fiscal Year 2023 Highlight: The True Colors LGBT+ ERG hosted a professor from a local university to present on the history of Pride month and its significance in the LGBT+ community.



ERG Leadership Certification

In July 2023, Greenbrier hosted an ERG Leadership Certification training to equip ERG Leaders, Executive Sponsors and other IDEAL leaders across business units with tools and guidance to develop successful ERGs and IDEAL committees. Partnering with Diversity Learning Solutions, the session consisted of training and development for inclusive leadership, focusing on strategies for building impactful ERGs.

Diversity & Inclusion (Cont.)

Allyship

In our 2022 ESG report, we set a goal to advance IDEAL messaging on internal and external platforms to promote and spotlight ERG and site activities and events.

Greenbrier celebrates diversity and the many identities of our employees through ERGs, learning and awareness and equitable access to resources for career development. During Pride month, the True Colors LGBT+ & Allies ERG created a video about allyship in the workplace. Several members of the ERG came forward, describing what it means to be an ally, what that looks like in the workplace and why supporting marginalized communities is important to developing an inclusive company culture. To learn more about allyship, visit the [blog](#).



Learning and Education

Greenbrier introduced monthly voluntary IDEAL training to all U.S. employees on the importance of diversity in the workplace and its value to our company. Each lesson included topics on diversity and inclusion and creating a respectful work environment.

44%
of office employees
completed all eight courses



94%
of production locations
completed all eight courses

IDEAL Connect 2023

Greenbrier hosted our DEI leaders from across the organization for IDEAL Connect in July 2023, our first-ever diversity, equity and inclusion summit. The event brought leaders together to receive education, tools and guidance around IDEAL programs from guest speakers and DEI experts. The group reviewed Greenbrier's journey with our IDEAL Commitment, recognizing challenges and successes, then collaborated to determine the next steps in our journey. We are confident about the path ahead for IDEAL.

This event completed our goal of hosting a leadership summit for Greenbrier's Diversity and Equity Strategy Committee, SAC and ERG Leaders.



Environmental Sustainability



Environmental Management System
Climate Change & Greenhouse Gas Emissions
Energy Usage
Waste & Waste Management

Materials Sourcing
Water Usage
Air Pollutants



Environmental Sustainability

In fiscal year 2023, Greenbrier focused on implementing our corporate environmental policies, introducing greenhouse gas (GHG) reduction initiatives and identifying trends and data collected across the organization. We also:

- Advanced our climate change risk management efforts
- Advanced on our Scope 2 GHG emission targets
- Enhanced product sustainability and efficiency, as possible
- Improved our environmental management systems
- Introduced third-party environmental audits
- Tracked waste management, including recycling

Greenbrier is committed to developing strategic and innovative approaches that move us forward on our ESG journey.

Environmental Management System

Greenbrier's sustainability and environmental compliance efforts continued in fiscal year 2023. We drafted the Environmental Management System (EMS) standards. Greenbrier closely tracks our sustainability efforts with the intent to continually reduce our environmental impact.

The corporate EHS policy pairs with our EMS to help ensure environmental compliance and performance, along with health and safety expectations.

Assigned Roles & Responsibilities

Our EHS team across the company is ultimately responsible for introducing and implementing the EMS at our production facilities.

Local facility management must be involved in implementation and consistent application.

Board and Greenbrier leadership oversee the EMS at a high level. The EMS lead reports directly to management.

Training



ONBOARDING

Training upon hiring covers enterprise-wide safety expectations, rules and regulations at Greenbrier.



RISK

Specific risks associated with an employee's role at Greenbrier. For example, our painters are rigorously trained in hazardous waste management.



INCIDENT

We host training to address incidents and issues as they occur.

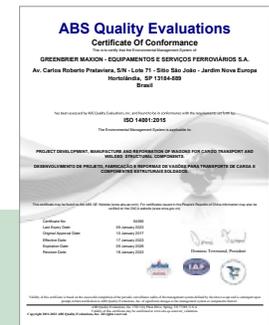


RETRAINING

Regular refresher training for specific job activities and overall Greenbrier expectations.

Environmental Audits

We began third-party environmental compliance audits at several of our larger locations. We are incorporating refreshed compliance assurance processes to enhance corporate oversight of environmental activities.



GOAL



In last year's report, we set a target to implement a corporate-level EMS by 2025. We made significant progress in implementing our EMS:



Four environmental audits were performed by a third party to identify opportunities for improvement.



Our three manufacturing facilities in Romania became ISO 14001-certified, bringing our total number of ISO 14001-certified manufacturing facilities to five.



We held our first Environmental Summit for environmental managers from across the company to receive training and share best practices.



We implemented a pilot project to automate corporate compliance oversight at five of our Maintenance Services facilities.



We upgraded our corporate-level environmental management standards for consistent application at all our facilities.

Climate Change & Greenhouse Gas Emissions

Greenbrier supports the TCFD and is working toward reporting in full alignment with the framework. In addition, we bolstered our attention to climate risk with additional steps toward the goal of achieving full TCFD alignment. This includes:

- Identifying physical risks in our various geographies, as described by our property insurance company (i.e., extreme precipitation, wind, temperature, drought, sea level)
- Providing updates on any progress related to developing a formal climate risk management process
- Disclosing additional information on the risk management processes for identifying and assessing climate-related risks (including any relevant materials from internal audit results)

In our 2022 ESG report, we announced our goal to reduce Scope 2 GHG emissions by 20% by 2027. The 20% Scope 2 reduction target is based on CO₂e per ton of steel in Greenbrier's finished product. We have made progress from our 2022 baseline. Our production facility in Tlaxcala, Mexico, completed Greenbrier's first pilot project for renewable energy with an installation of 925 solar panels in the company parking lot, with a capacity of 498 kilowatts (kW) of power. This project has a projected average energy production of just over 67,000 kW-hours per month. In fiscal year 2024, we plan to evaluate the feasibility of increasing the renewable energy capacity at Greenbrier Tlaxcala.



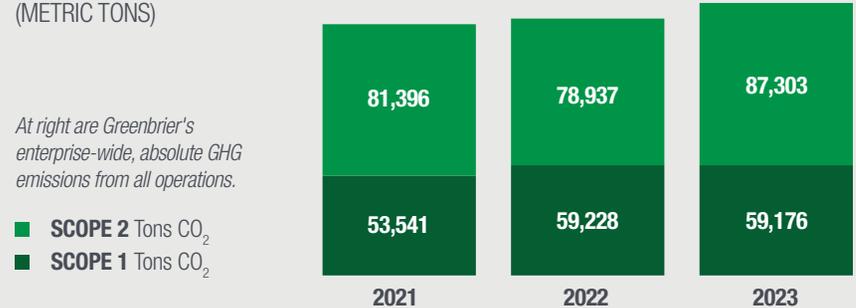
Our absolute GHG emissions increased in fiscal year 2023 due to higher production levels. Greenbrier is a relatively low GHG emitter, and the majority of our emissions are from purchased energy use (Scope 2). We continue to monitor our GHG emissions and are working toward establishing additional reduction goals in the future.

Greenhouse Gas (GHG) Emissions⁶

Greenbrier is a relatively low GHG emitter. The majority of our emissions are Scope 2 and derive from purchased energy use.

CO₂e Emissions (Total Scope 1⁷ and Scope 2⁸)

(METRIC TONS)

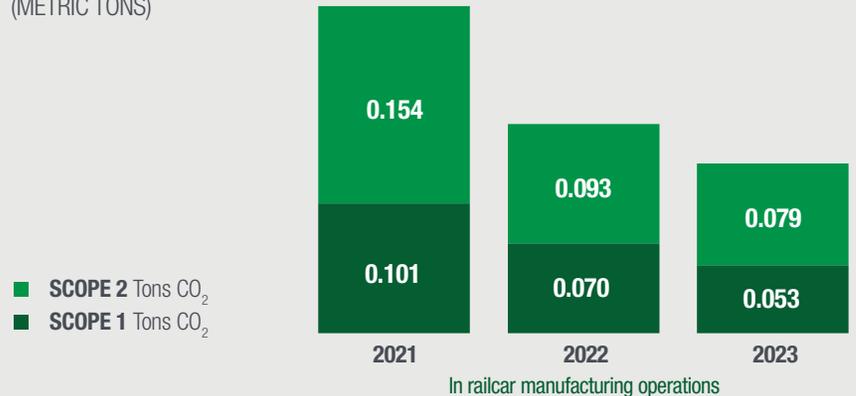


At right are Greenbrier's enterprise-wide, absolute GHG emissions from all operations.

Measuring GHG intensity by tons of CO₂e per ton of steel in the finished product is considered a best practice for tracking GHG intensity in our industry. As indicated below, our CO₂e per ton of steel in finished product decreased from fiscal year 2022 to fiscal year 2023. Due to the long life span of railcars, the energy used to create the product is dispersed up to 40 years or more. This means the CO₂e used is reduced each year that the railcar is in service.

CO₂e per Ton of Steel in Finished Product (Total Scope 1⁷ and Scope 2⁸)

(METRIC TONS)



⁶ Fiscal years 2021 and 2022 energy emission factors were updated during the calculation transition from a spreadsheet to the EHS information management system. Fiscal year 2022 estimated values were updated to actual values.

⁷ Scope 1: Direct GHG emissions from sources owned or controlled by a company. Diesel, Gasoline, Propane, Natural Gas, Acetylene, Propylene, CO₂, Coal, Heating Oil, LPG. Fiscal year 2021 and 2022 energy emissions factors were updated during the calculation transition from a spreadsheet to the EHS information management system.

⁸ Scope 2: Indirect GHG emissions from purchased electricity use

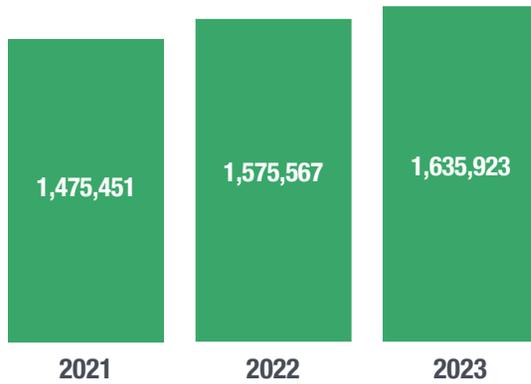
Energy Usage⁹

Greenbrier continues to measure enterprise-wide energy use. We primarily use energy during the production process through welding machines to manipulate steel. In addition, natural gas is used for cutting metal and heating facilities during winter months.

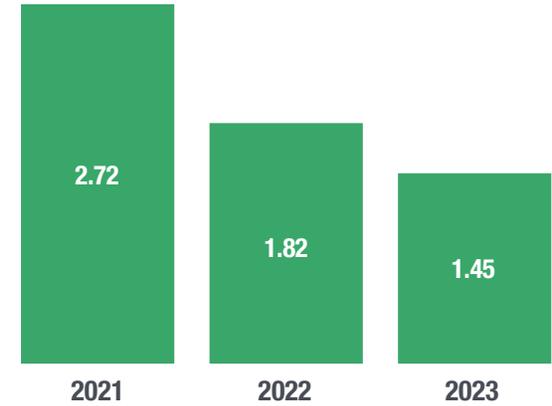
Our production levels increased in fiscal year 2023, which increases our baseline energy use. However, our energy intensity (energy per ton of steel in finished product) decreased, as the baseline energy levels that we employ regardless of production level are spread over more products.

⁹ Fiscal year 2021 and 2022 energy factors were updated during the calculation transition from a spreadsheet to the EHS information management system. Fiscal year 2022 estimated values were updated to actual values.

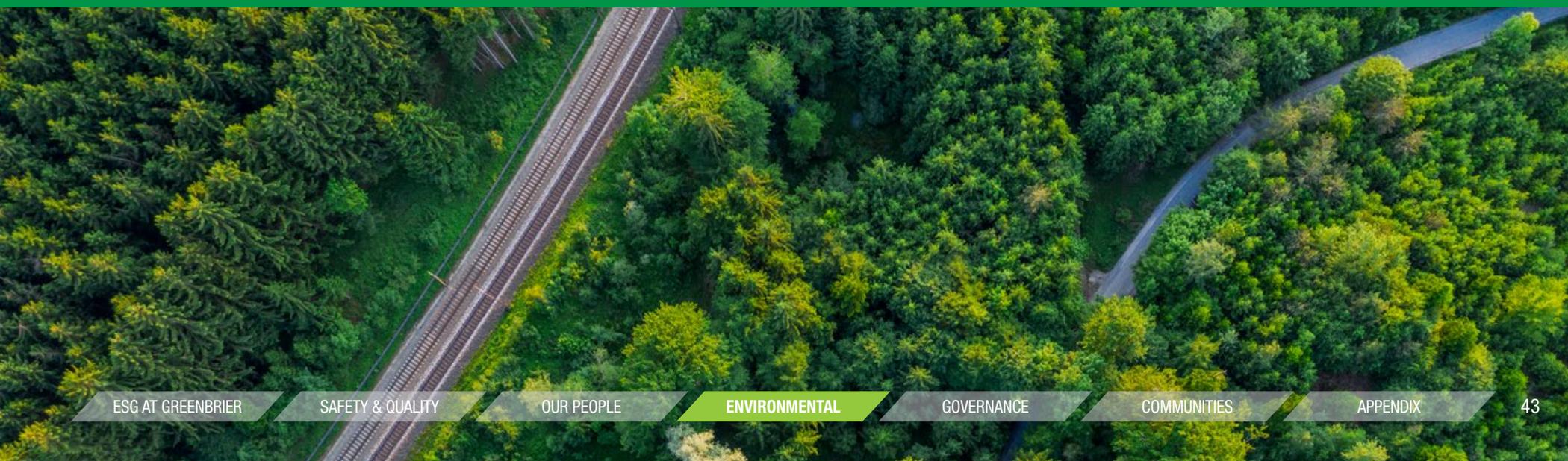
Total Energy Used
(GIGAJOULES)



Energy per Ton of Steel in Finished Product
(GIGAJOULES / METRIC TON)



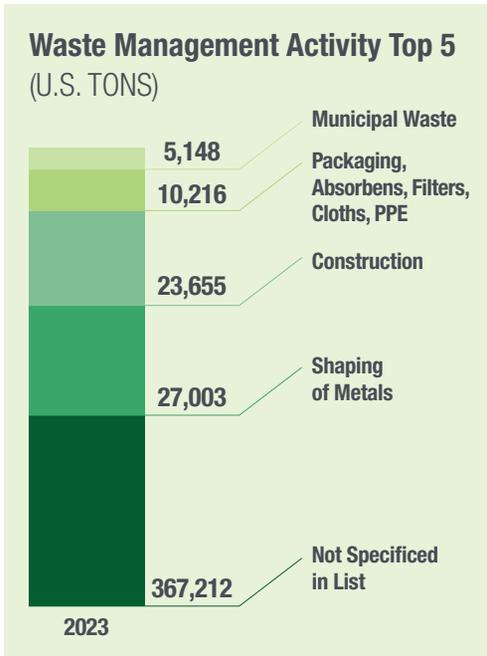
In railcar manufacturing operations



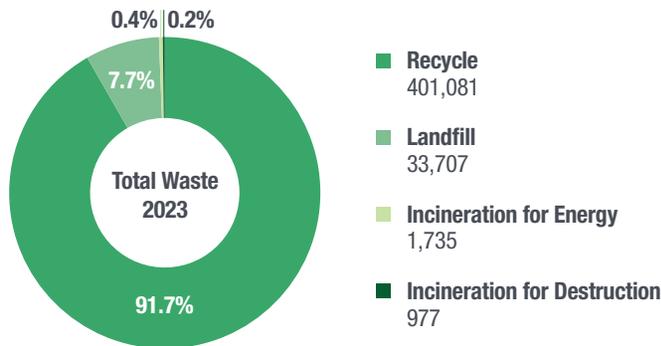
Waste & Waste Management

Greenbrier recognizes the importance of high-quality waste management practices.

In fiscal year 2022, we set a goal to implement procedures for air quality, waste management and water quality control. Our greatest effort was improving waste and recycling tracking. We surveyed various means by which waste can be tracked and selected our best practices as implemented at our manufacturing facility in Świdnica, Poland. Our system uses the Guidance on Classification of Wastes, which is commonly applied in the EU.

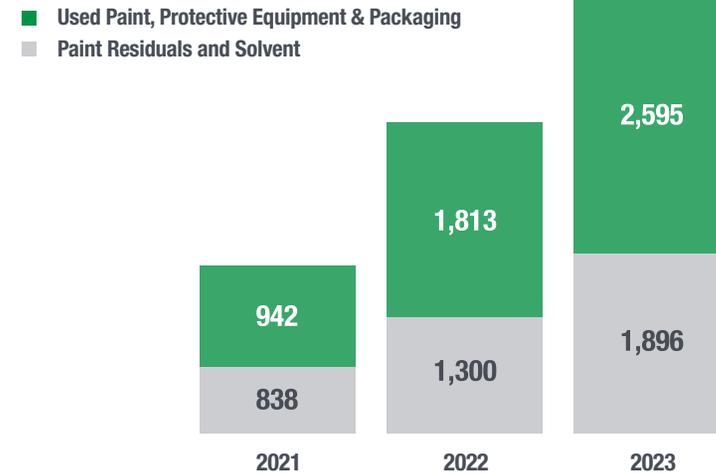


Waste Totals by Recycle and Disposal Method (U.S. TONS)



GOAL We plan to analyze the new data in fiscal year 2024 and establish a waste reduction goal and a goal to reduce the use of hazardous solvents.

Paint Waste Activity (U.S. TONS)



Paint waste activity increased in fiscal year 2023 due to a significant increase in production levels across the organization.

Scrap Recycling

In fiscal year 2022, Greenbrier Marmaduke created a recycling program to identify items around the facility that could be repurposed or recycled instead of going to landfills. Historically, this included materials such as welding tips, nozzles and copper from weld leads. Since its start, the scrap recycling program has expanded to three facilities—Greenbrier Marmaduke, Paragould and Kennett—and includes wood crates and pallets.

Materials Sourcing

Greenbrier is committed to responsible materials sourcing. As described in our Supplier Code of Conduct and Conflict Minerals Policy, we expect the same from our suppliers.

Our manufacturing process is significantly removed from the mining, smelting and refining of conflict minerals. We have a process to help ensure we maintain strict quality assurance and testing requirements for sourcing materials. In addition, this process ensures we work with suppliers who abide by our policies. If a supplier does not comply and fails to take corrective actions, Greenbrier may take measures such as discontinuing the partnership.

Greenbrier discloses the results of our reasonable country of origin process and any additional due diligence in Form SD and Conflict Minerals Report as required by the SEC. These reports describe our due diligence efforts, including risk mitigation.

Our products do not generally contain substances of concern. Should we come across a concerning product, we will aim to minimize or eliminate it from our pipeline. We also apply procedures around conflict minerals and hazardous materials management.

Recycled Steel

Greenbrier and our customers value recycling and the environmental and cost savings it brings. Greenbrier considers all types of recycling, as described on [page 44](#). However, our railcars and components deliver the most material to our recycled content.

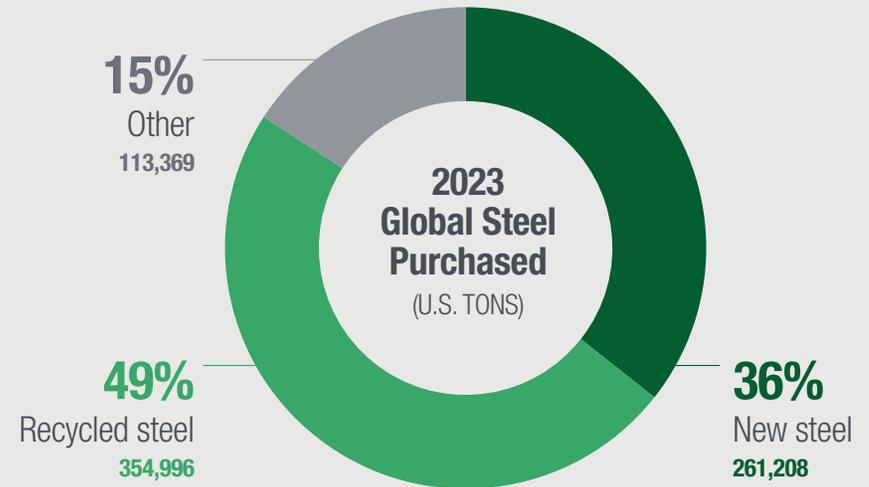
DID YOU KNOW

Steel supports a circular economy: It can be continuously recycled without losing quality. Every steel plant is also a recycling plant, and all steel production uses scrap, up to 100% in an electric arc furnace (EAF) and up to 30% in a blast furnace (BF)¹⁰.

Greenbrier's recycled steel content increased in fiscal year 2023. This is partially due to a vendor mill that idled capacity. We aim to balance the prioritization of steel mills that use EAF furnaces with local steel mills that might use a higher percentage of BF furnaces, while also enhancing employment opportunities in the regions where we operate. Using local vendors creates more stability in the supply chain, reduces fuel use since material travels shorter distances and optimizes scheduling conditions by reducing international border crossings.

¹⁰ <https://worldsteel.org/steel-topics/raw-materials/>

Recycled Steel



Fiscal Year 2022: 43% Recycled steel | 41% New steel | 16% Other

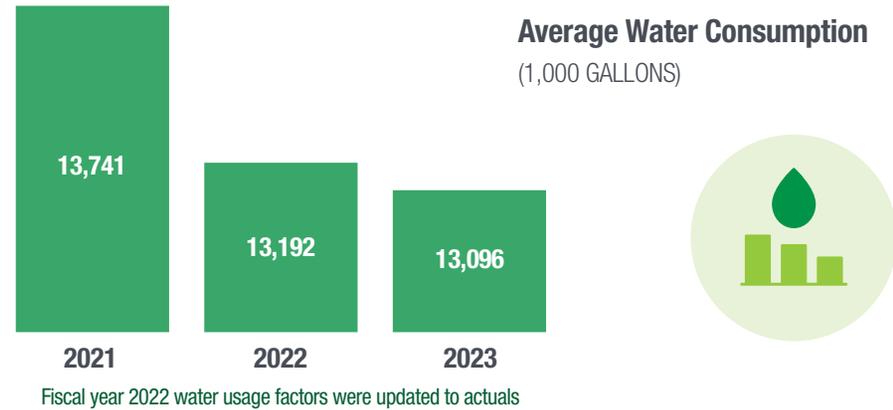
The steel used in the High-Strength Steel (HSS) Gondola™ projects comes from integrated mills. See more about our HSS process on [page 24](#).

Insourcing Project

Our facilities are investing in reducing outsourcing and the corresponding transportation required by outsourcing components. This will help ensure Greenbrier has further control over quality standards. In addition, it should bolster internal component refurbishing capabilities, which reduces new steel use.

Water Usage

As we have demonstrated in previous years, Greenbrier consumes very little water for the size of our manufacturing facilities: **roughly the same amount as a high school**. Our water use stems primarily from faucets and toilets.



Air Pollutants

Our air emissions are, on average, at or below the level of emissions that the U.S. Environmental Protection Agency (EPA) would define as a major source. The majority of the air emissions at Greenbrier come from painting operations.

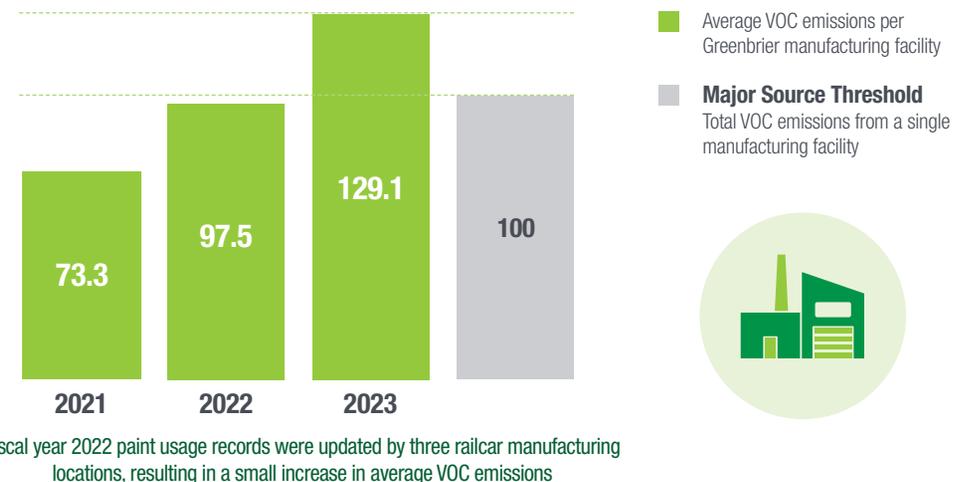
Greenbrier's actual daily emissions from air pollutants are at extremely low concentrations and have minimal impact on the environment. Similarly, such air pollution emissions at Greenbrier have a non-material impact on employees and surrounding communities due to controls and appropriate PPE use.

Volatile Organic Compounds (VOCs):

Greenbrier's facilities are not large emitters of VOCs relative to other industrial operations near Greenbrier sites. Our environmental impact with respect to VOCs is low and comes primarily from painting in our production process. VOC emissions increased in fiscal year 2023 due to a significant increase in production levels across the company.

Average VOC Emissions

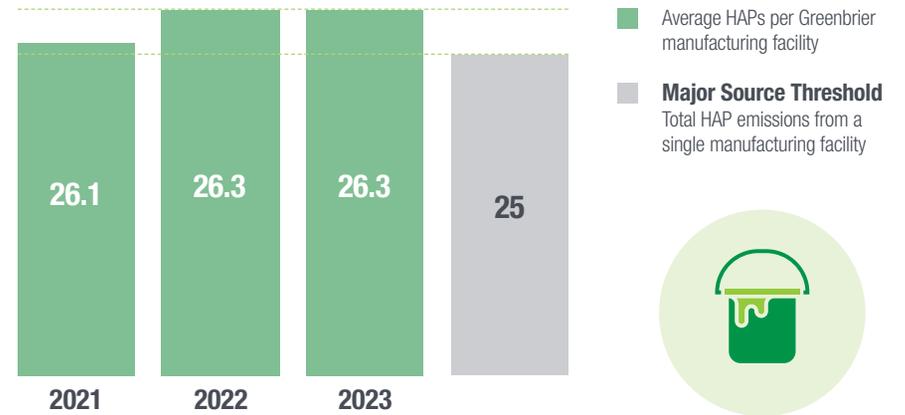
(COMPARED TO U.S. EPA MAJOR SOURCE THRESHOLD, U.S. TONS)



Hazardous Air Pollutants (HAPs):

Our HAPs emissions are slightly higher than U.S. EPA Major Source Threshold levels. HAPs emissions primarily come from painting in our production process.

Average Hazardous Air Pollutants (HAPs) Emissions (COMPARED TO U.S. EPA MAJOR SOURCE THRESHOLD, U.S. TONS)



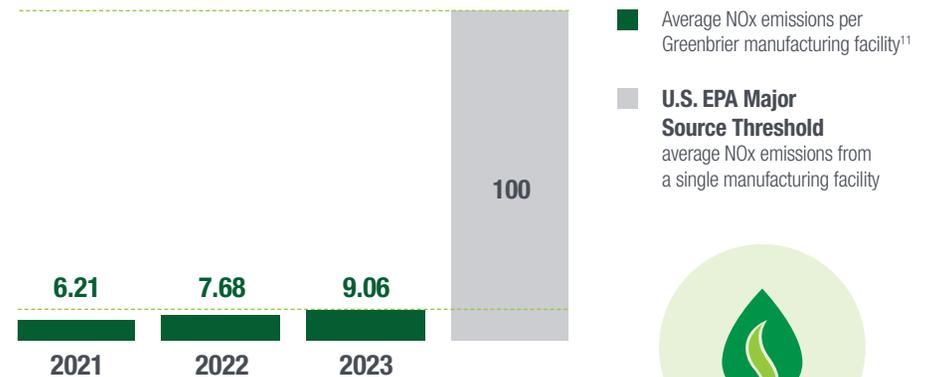
Fiscal year 2022 paint usage records were updated by three railcar manufacturing locations, resulting in a small increase in average HAPs emissions



Nitrogen Oxides (NOx):

Our manufacturing facilities emit nominal amounts of NOx because we have minimal onsite combustion. This is the same reason our GHG emission totals are low.

Average NOx Emissions (COMPARED TO U.S. EPA MAJOR SOURCE THRESHOLD, U.S. TONS)



An emission factor was updated in fiscal year 2021 and 2022. Fiscal year 2022 estimated values were updated to actuals



¹¹ Greenbrier's average NOx Emissions <1/10th of EPA's size of a Major Source

Governance & Ethics



[Governance & Board of Directors](#)

[Risk Management & Oversight](#)

[Cybersecurity](#)

[Business Ethics & Integrity](#)

THE
GREENBRIER
COMPANIES

ESG AT GREENBRIER

SAFETY & QUALITY

OUR PEOPLE

ENVIRONMENTAL

GOVERNANCE

COMMUNITIES

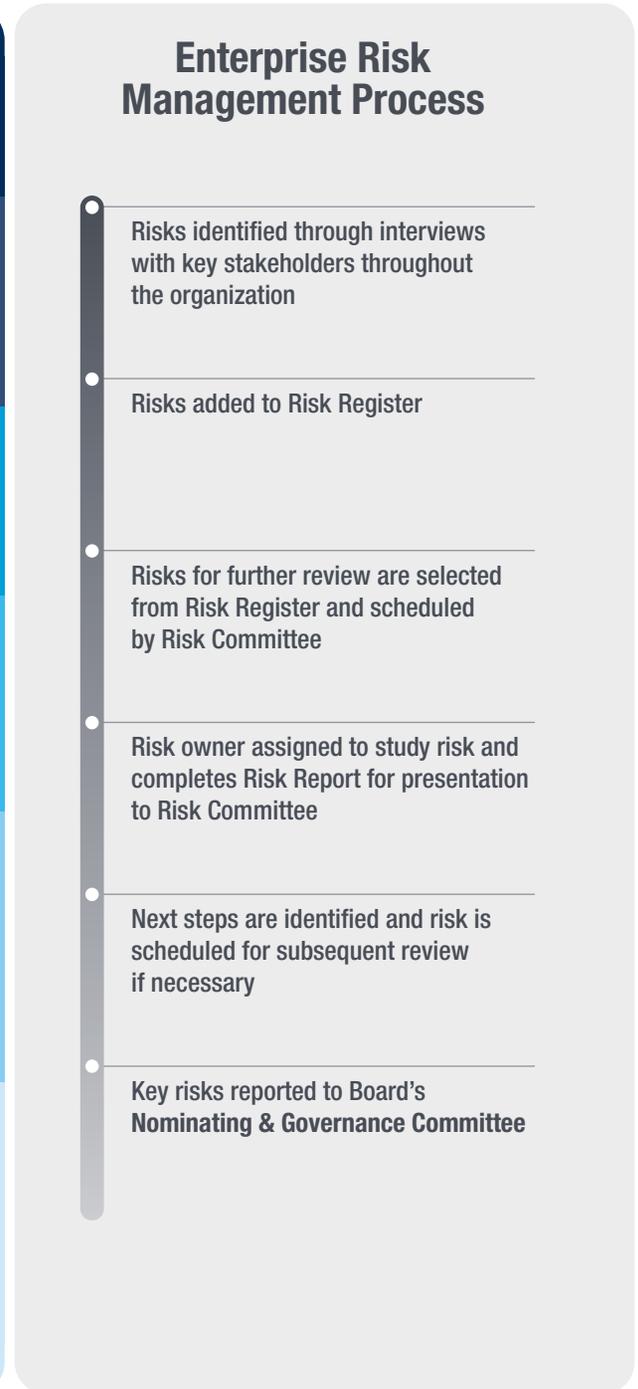
APPENDIX

Governance & Ethics

Greenbrier recognizes that one of our great strengths is our sound governance and leadership structure. An engaged Board of Directors participates in all sectors of our company's governance. The Board, along with our experienced management team, provide accountability for responsible business practices, as well as our sustainability performance.

Governance & Board of Directors

Greenbrier's Board of Directors is actively engaged and dedicated to ensuring accountability and oversight on behalf of our shareholders and stakeholders. With accomplished backgrounds in multiple industries, our Board provides insight and leadership to guide our continued business success.



Governance & Board of Directors (Cont.)

The Greenbrier Board provides critical strategic risk management and human capital management oversight for Greenbrier’s business and corporate affairs. This occurs most directly through its Audit, Compensation and Nominating and Governance committees. At January 2024, our Board includes Chair, Admiral Tom Fargo (Ret.), an additional seven independent directors and our CEO & President, Lorie Tekorius.

Effective after Greenbrier's 2024 Annual Meeting of Shareholders, we will have an increasingly diverse board, including 44% female members and 33% members who identify as ethnically diverse ([2024 Proxy Statement, page 13](#))

Greenbrier has completely refreshed its Board over the last eight years and has an average tenure of approximately five years. The Board regularly engages in identifying highly qualified candidates for future Board service.



AUDIT

Cybersecurity and information technology resilience and security, related risk monitoring, integrity and public reporting of the company’s financial statements

COMPENSATION

Oversight of compensation strategy and incentive plans design, metrics and targets for company executives, directors and the CEO, assessing the independence of any compensation consultants, related risk monitoring

NOMINATING & GOVERNANCE

Risk monitoring (generally), IDEAL, ESG matters and reporting (including climate-related topics), human capital management

See more in the [2024 Proxy Statement](#).

Risk Management & Oversight

Greenbrier’s Enterprise Risk Management (ERM) program is used to evaluate risks, including climate-related risks, that have the potential to substantially impact the organization and shareholder value. This process is led by a Risk Committee that includes corporate and business unit senior leadership. By representing the various business units, we promote consistency in how we manage risks across Greenbrier.

Our ERM process helps ensure that the appropriate risk owner is assigned to each risk and that action steps are established to mitigate potential negative impacts. In fiscal year 2023, we tracked approximately 40 risks through this process, including risks related to climate, safety and loss prevention, as well as operational risks.

Quarterly, selected risks are reported to the Nomination and Governance Committee of the Board of Directors for their oversight and input.

Greenbrier’s Board oversees the ERM at the highest level. In addition, every Board member has experience in risk management and has experience across a variety of ESG topics.

Risk Management & Oversight (Cont.)

Board Experience

Experience Contributions

	Fargo	Felton	Garza	Huffines	Jack	Ottensmeyer	Tekorius	Teramoto	Williams
CEO/President	●			●		●	●		●
Diversity Initiatives	●	●	●	●	●	●	●	●	●
Financial Expertise		●	●	●	●	●	●	●	●
Government/Military	●	●	●	●				●	
International	●	●	●		●	●	●	●	●
Legal Training			●						●
Public Company	●		●	●		●	●		
Public Policy	●	●	●	●		●		●	
Rail/Transport/Industrial	●	●	●		●	●	●	●	
Risk Management	●	●	●	●	●	●	●	●	●
Talent Development	●	●	●	●	●	●	●	●	●
Sustainability	●	●	●		●	●	●		●

* Board Members as of January 5, 2024



Cybersecurity

Cybersecurity is an integral component of our ESG commitments. As we deploy more advanced technology to improve our products and services, we make significant investments to help ensure we do so responsibly. We strive to build a security program that instills customer trust by protecting information assets.

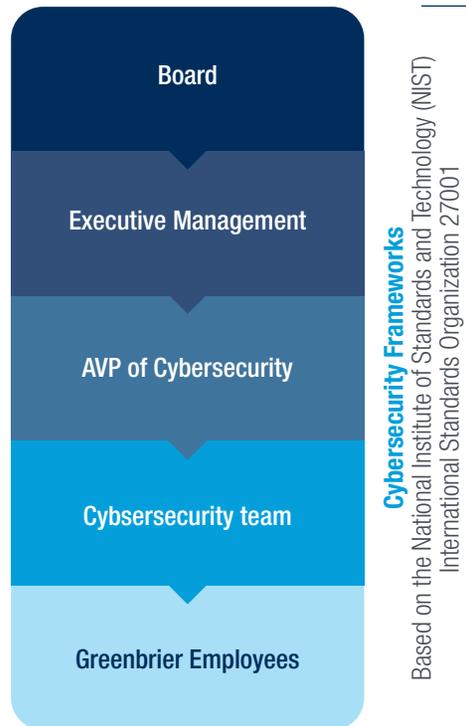
Through this ESG commitment to cybersecurity, Greenbrier demonstrates that we are a responsible corporate citizen that deeply values the trust of our stakeholders.

Cybersecurity Governance

Greenbrier has established a governance structure that oversees our cybersecurity program and practices with clear accountability. This effort is led by a team of cybersecurity professionals, currently directed by our Chief Information Officer. We report program progress and issues at the board and executive levels.

We operate under a framework based on the National Institute of Standards and Technology (NIST) and the International Standards Organization 27001. The cybersecurity program is built to provide defense in depth through people, processes and technology.

We adhere to international standards for cybersecurity and information management and are transparent about our cybersecurity practices. In addition, we engage third-party auditors and assessors to evaluate and validate our cybersecurity controls.



Cybersecurity Program and Training

We understand our responsibility toward promoting cybersecurity awareness. People are our best resource in the effort to prevent cyberattacks. As such, Greenbrier invests in regular awareness training and education for our employees, including phishing simulations and delivering security guidance on emerging technologies.

In fiscal year 2023, we hosted our annual cybersecurity training in the U.S. and received a 100% completion rate.

Our cybersecurity team generated more than 5,000 phishing simulations in the U.S. from January-July 2023 and received a 97% success rate in defending against simulated attempts. The industry average is ~95%.

5,000+
generated phishing
simulations

97% ~**95%**
success rate
in defending
industry
average

Cyber-Risk Management

We have deployed technology to prevent, detect and respond to threats to our information assets. Ensuring good cyber hygiene is a key function of many of the technologies we have deployed, as this is foundational to reducing risk. These technologies, combined with our incident response policies and process, enhance our ability to manage incidents should they arise. We practice incident response through tabletop exercises and simulations across the environment multiple times throughout the year.

Cybersecurity (Cont.)

Customer Focus

Part of a sound cybersecurity program is safeguarding product security through life cycle management. The cybersecurity team works closely with our development teams to help ensure our products are built and maintained in a manner that reduces the possibility of a negative impact on customers. We bring third parties in annually to review the security of our custom-developed, customer-facing applications.

Greenbrier has obtained a SOC 2 certification, scoped for our custom application environment. This is a proactive way to communicate with customers about the details of our IT security program. An independent auditor reviews Greenbrier's controls for our policies and confirm our controls perform appropriately. This process helps provide customers assurance that we have a strong security program.

Approaching cybersecurity through people, processes and technology is all part of our commitment to safeguarding the personal information of our customers, employees and partners against unauthorized access, disclosure or alteration. We strive to create a safe and secure digital environment, where trust is the foundation of our interactions.

As cyber threats evolve, so will our cybersecurity strategies. We commit to actively monitoring the latest developments in cybersecurity, continuously improving our defenses and collaborating with industry peers, regulators and law enforcement to strengthen the cybersecurity ecosystem.



Business Ethics & Integrity

At Greenbrier, our employees follow our Code of Business Conduct and Ethics and are guided by our Core Value of Respect for People.

We strive to ensure that all employees act ethically and with integrity in all aspects of their work. Our Code of Business Conduct and Ethics is instructive in this area, and our long-held Core Value of Respect for People is a guide to all our interactions inside and outside of Greenbrier. Our Code covers a variety of important ethics topics, including:

- Acting honestly in all dealings with customers, suppliers and each other
- Avoiding conflicts of interest
- Complying with the Foreign Corrupt Practices Act (FCPA) and the anti-bribery/anti-corruption laws of countries in which we operate
- Following safety rules and responsible environmental practices
- Maintaining accurate books and records
- Prohibiting discrimination and harassment
- Prohibiting substance abuse in the workplace
- Protecting Greenbrier property, facilities and confidential information
- Reporting grievances and concerns through a variety of mechanisms and procedures, including our anonymous EthicsPoint whistleblower reporting hotline



We communicate our values to our employees. We deliver regular ethics and compliance training, both online and in-person, on our Code and other key ethics and compliance topics and policies. We work to establish a healthy corporate culture with a clear tone from the top regarding acceptable and unacceptable conduct.

Our training topics include FCPA/anti-corruption, conflicts of interest, discrimination and harassment and more. As part of this training, we stress the importance of reporting concerns about known or suspected violations of our Code. We offer multiple methods and escalation procedures, including our confidential and anonymous EthicsPoint reporting system.

As a U.S.-based public company with international operations, we also have an FCPA/anti-corruption policy and compliance program, which includes FCPA awareness training. Greenbrier employees in functions including Commercial, Sales, International, Finance and Accounting, Purchasing/Procurement and any other areas that present higher FCPA risk, are required to undergo regular FCPA/anti-corruption awareness. Our FCPA compliance program also includes risk assessments and anti-corruption due diligence of key third parties, such as international agents and business partners, to help ensure that we do business only with reputable organizations. We also prohibit “facilitation payments” (also known as “grease” payments), which the FCPA defines as payments to a foreign official or political party in order to expedite the performance of duties of a non-discretionary nature. We have experienced no monetary losses, fines or penalties resulting from any legal proceeding alleging unethical, fraudulent or anti-competitive behavior by Greenbrier.

Our ethics and compliance program is managed by an experienced corporate compliance attorney in our Legal department whose principal duties relate to overseeing and implementing the program, including Code of Conduct and FCPA awareness training. This team member also manages our EthicsPoint whistleblower reporting system globally, and reviews, oversees and investigates reports that are received through that system.

Code of Ethics training highlights

- Code of Conduct online training launched to more than Greenbrier 3,700 employees in the U.S., Mexico, Poland, Brazil, Canada, Romania and Slovakia, in the appropriate local languages, in fiscal year 2023.
- The typical cadence of Code of Conduct training is at least every two years.
- We also conduct regular training on related topics, including avoiding conflicts of interest and preventing discrimination and harassment, as well as on workplace safety and violence, data privacy and the handling of confidential information and computer security.

Business Ethics & Integrity (Cont.)

Political Giving

To support our governmental affairs efforts in Washington, D.C., qualified Greenbrier employees organized a federal political action committee (PAC). Board members and employees from the Vice President level and above are eligible to participate in the PAC. The Greenbrier PAC creates opportunities to engage on issues that shape the future of the freight rail industry, including advancing environmentally-friendly freight mobility. A detailed report of our PAC activities can be found on the [FEC website](#).

In calendar 2023, the Greenbrier PAC contributed \$74,500 to a number of candidates for federal office.

Additionally, Greenbrier periodically contributes to state and local candidates and/or ballot measures.



Commitment to Human Rights

At Greenbrier, we are committed to respecting the rights of all people.

Greenbrier's [Human Rights Policy](#) demonstrates our commitment to respect the rights of all people while supporting our customers, employees, shareholders and communities. The policy includes:

- Commitment to responsible sourcing and supply chain practices
- Commitment to workplace health, safety and security
- Compliance with applicable laws governing working hours and the payment of wages and benefits that are fair and competitive for our industry
- Prohibition of discrimination and harassment
- Prohibition of forced or child labor
- Prohibition of human trafficking, slavery or coercive labor practices at Greenbrier or in our supply chain
- Respect for our employees' freedom of association and their right to collective bargaining, including the right to join, form or not join a labor union

Our [Human Rights Policy](#) works in conjunction with our Code of Business Conduct and Ethics and other relevant policies, including our Supplier Code of Conduct, Conflict Minerals Policy, Corporate Social Responsibility Policy, Policy on Coercive Labor Practices and California Transparency in Supply Chains Act of 2010 Corporate Disclosure. Our policies can be found on our [website](#).

We encourage our employees, suppliers, customers and any other Greenbrier stakeholders to report any known or suspected violations of our Code of Business Conduct and Ethics and our Human Rights Policy, and any other company policy, through various reporting mechanisms, including through our anonymous EthicsPoint reporting hotline.

Communities



[Corporate Giving](#)
[Employee Volunteerism](#)
[Scholarships](#)

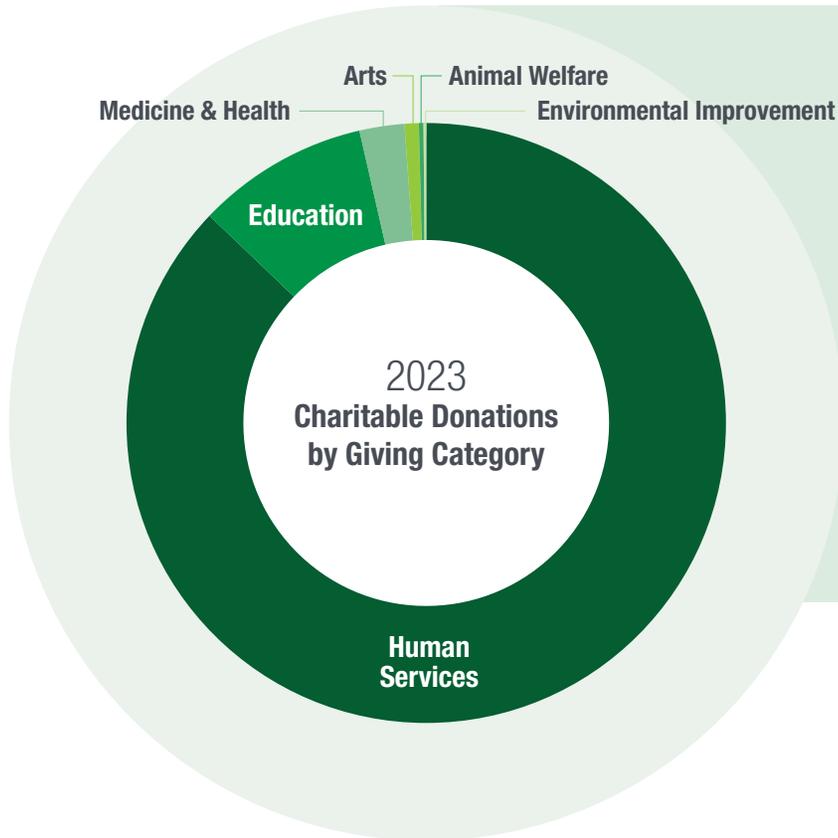


Communities

Consistent with our Core Value of Respect for People, Greenbrier strives to make a positive difference in the communities where we operate. That's why we encourage volunteerism and philanthropy by our employees. This outreach builds stronger communities, fulfills our social responsibilities and contributes to our long-term success.

Corporate Giving

Through our Corporate Giving Committee, Greenbrier donated \$1 million to nonprofits and organizations across the United States in fiscal year 2023. By working with and supporting our community partners, we actively contributed to the wellbeing of our communities and addressed the pressing issues they face.



Annual Charitable Donations (U.S. DOLLARS)



In fiscal year 2023, Greenbrier's U.S. Corporate Giving Committee expanded, diversifying its membership to ensure charitable giving is making a difference across more of our geographic footprint. Expanding the Committee grew our network of community partnerships across the United States.

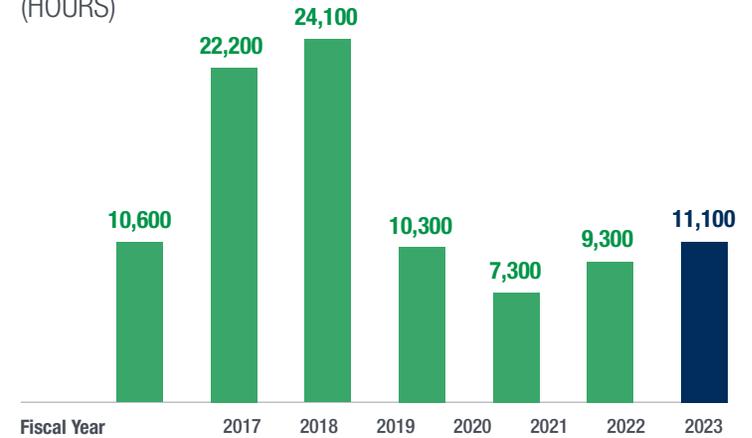
Fiscal years 2022 and 2023 were elevated due to a special one-time donation to the Papé Foundation. See [page 59](#) for more on this partnership.

Employee Volunteerism

Greenbrier supports volunteerism across our employee base. All full-time, regular employees based in the U.S. in non-production roles are eligible for Volunteer Time Off (VTO) after three months of continuous full-time employment. Our production locations also facilitate local community engagement and volunteer activities, such as participating in the Paragould, Arkansas Autism Walk during Autism Awareness Month in April.

We support a range of organizations and are proud to partner on volunteer activities:

Volunteer Hours
(HOURS)



Habitat for Humanity

Throughout fiscal year 2023, the Greenbrier team strengthened its relationship with Habitat for Humanity, a global nonprofit housing organization working in local communities across the U.S. and in 70 countries. Greenbrier teams from Oregon, Nebraska and Arkansas joined Habitat organizers on Build Days throughout the year.



Sunshine Division

The Portland Police Bureau Sunshine Division is a Portland-based nonprofit providing food and clothing assistance to local families and individuals in need. In March, Greenbrier's corporate HR department volunteered for a morning at the organization's warehouse to put together food boxes. During our winter holiday food drive, employees from Greenbrier's corporate headquarters in Oregon donated more than 2,300 pounds of food.



Turkey

In February, Turkey was hit with a 7.8 magnitude earthquake that killed and injured hundreds of thousands and left many more homeless, including many in neighboring Syria. Within weeks, Greenbrier employees in the U.S. joined a worldwide fundraiser to help the victims and survivors on the road to recovery. Romanian employee Oana Marica helped crews sort through the rubble and assist survivors.

Scholarships

Greenbrier is committed to fostering the educational growth of the next generation of workers through its support for scholarships.

GOAL



Our goal is to fund five new scholarships by 2025 focused on historically underrepresented communities. We have established and/or participated in four scholarships to date:

Black American Engineering Scholarship

As part of our larger commitment to support education for underrepresented communities, Greenbrier contributed to the Black American Engineering Scholarship through The Helping Project. This organization promotes educational STEM opportunities for Black American students.

University of Oregon Foundation Law Program

Greenbrier contributed \$2,500 in fiscal year 2023 to the University of Oregon law scholarship program. The students who receive these scholarships serve at nonprofits that serve the public interest. Typically, the recipients of legal assistance are in underserved and underrepresented communities.

Black River Technical College (BRTC) Scholarship

The Black River Technical College Scholarship extends Greenbrier's reach across our areas of operation. Through our partnership with BRTC in Paragould, Arkansas, we're able to support students obtaining an education in a technical field.

William A. Furman Technical Training Scholarship

In fiscal year 2023, Greenbrier awarded the second \$10,000 installment of the William A. Furman Technical Training Scholarship. This scholarship is given to students pursuing an education in a technical field at Portland Community College.

Other scholarship highlights:

Hispanic Metropolitan Chamber (HMC) Scholarship

In fiscal year 2023, Greenbrier donated \$3,000 to the HMC Scholarship fund. This year's recipient will pursue a master's degree in civil engineering.

Grupo Industrial Monclova Papé Foundation

Greenbrier completed its \$2 million commitment to the Papé Foundation in fiscal year 2023. This contribution was initiated in recognition of Greenbrier's joint venture, Greenbrier GIMSA, with Grupo Industrial Monclova. The foundation supports school construction, hospital development, student scholarships, engineering schools and sports facilities.

Appendix



[Acronym Index](#)

[SASB Index](#)

[TCFD Index](#)

Acronym Index

A
AAR
Association of American Railroads

ASTM
American Society for
Testing and Materials

B
BF
Blast Furnace

BRTC
Black River Technical College

C
CO₂e
Carbon dioxide equivalent

D
DART
Days Away, Restricted or Transferred:
The number of recordable injuries and
illnesses per 100 full-time employees
that resulted in days away from
work or restricted work activity

DAV
Disabled American Veterans

DEI
Diversity, Equity and Inclusion

E
EAFF
Electric Arc Furnaces

EHS
Environment, Health and Safety

EPA
United States Environmental
Protection Agency

ERG
Employee Resource Group

ERM
Enterprise Risk Management

ESG
Environmental, Social, Governance

F
FCPA
Foreign Corrupt Practices Act

FRA
Federal Railway Administration

G
GBU
Greenbrier University

GBX
The Greenbrier Companies

GHG
Greenhouse Gases

GJ
Gigajoules

H
HAPs
Hazardous Air Pollutants

HBCUs
Historically Black Colleges
and Universities

HMC
Hispanic Metropolitan Chamber

HSS
High-Strength Steel™

I
IDEAL
Inclusion, Diversity, Equity,
Access and Leadership

IR
Injury Rate

K
kW
Kilowatts

L
LRW
League of Railway Women

N
NAM
National Association of Manufacturers

NDT
Non-destructive testing

NIST
National Institute of Standards
and Technology

NO_x
Nitrogen Oxides

P
PAC
Political Action Committee

PiD
Partners in Diversity

PM
Particulate Matter

PPE
Personal Protective Equipment

R
R&D
Research and Development

RFP
Request for Proposal

S
SACs
Site Action Committees

SASB
Sustainable Accounting Standards Board

SDG
United Nations Sustainable
Development Goals

STB
Surface Transportation Board

T
TCFD
Task Force on Climate-Related
Financial Disclosures

TRIR
Total Recordable Incident Rate

TIR
Total Injury Rate

V
VOCs
Volatile Organic Compounds

VTO
Volunteer Time Off

SASB Index

INDUSTRIAL MACHINERY & GOODS

Topic	Accounting Metric	Category	Unit Of Measure	Code	Response/Comment	SDG Goal	SDG Target
Activity Metric	Number of units produced by product category	Quantitative	Number	RT-IG-000.A	Greenbrier's annual production mix can vary widely across product type and manufacturing volume. Sales data is provided in Greenbrier's annual report to shareholders on Form 10-K.	N/A	N/A
	Number of employees	Quantitative	Number	RT-IG-000.B	15,700		
Energy Management	Total energy consumed	Quantitative	Gigajoules (GJ), Percentage (%)	RT-IG-130a.1	FY23: 1,635,923 Gigajoules (GJ) total energy usage. Electricity usage tracked in Megawatt Hours, converts to 751,468 GJ. Onsite fuel use is tracked and is 884,455 GJ.		Target 12.2 By 2030, achieve the sustainable management and efficient use of natural resources.
	Percentage grid electricity				45.9%		
	Percentage renewable				Not tracked separately.		

SASB Index (Cont.)

INDUSTRIAL MACHINERY & GOODS

Topic	Accounting Metric	Category	Unit Of Measure	Code	Response/Comment	SDG Goal	SDG Target
Employee Healthy & Safety	Total Recordable Incident Rate (TRIR)	Quantitative	Rate	RT-IG-320a.1	FY22 IR was 1.10 FY23 IR is 1.05 FY22 DART rate was 0.75 FY23 DART rate is 0.79		Target 8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.
	Fatality rate				0.000 in FY22 0.000 in FY23		Target 3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.
	Near miss frequency rate				FY22: 11.03 FY23: 9.84 Greenbrier emphasizes the importance of reviewing all work-related environmental, health and safety incidents, including near misses.	Target 3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.	

SASB Index (Cont.)

INDUSTRIAL MACHINERY & GOODS

Topic	Accounting Metric	Category	Unit Of Measure	Code	Response/Comment	SDG Goal	SDG Target
Fuel Economy & Emissions in Use-Phase	Sales-weighted fleet fuel efficiency for medium- and heavy-duty vehicles	Quantitative	Gallons per 1,000 miles	RT-IG-410a.1	Not applicable to Greenbrier.	N/A	N/A
	Sales-weighted fuel efficiency for non-road equipment	Quantitative	Gallons per hour	RT-IG-410a.2	Greenbrier does not make equipment with engines for transportation purposes, and the fuel efficiency does not apply. Given the diversity of our products and applications in which our products are used, as well as the lack of industry standards to estimate on a per-unit-of-work basis, Greenbrier does not calculate sales-weighted fuel efficiency or emissions in this manner.		
	Sales-weighted fuel efficiency for stationary generators	Quantitative	Watts per gallon	RT-IG-410a.3			
	Sales-weighted emissions of (1) nitrogen oxides (NOx) and (2) particulate matter (PM) for: (a) marine diesel engines, (b) locomotive diesel engines, (c) on-road medium- and heavy-duty engines and (d) other non-road diesel engines	Quantitative	Grams per kilowatt-hour	RT-IG-410a.4			
Materials Sourcing	Description of the management of risks associated with the use of critical materials	Discussion and Analysis	N/A	RT-IG-440a.1	Greenbrier responsibly sources the raw materials used to build our products. Please see page 45 for more information.		Target 12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.
Remanufacturing Design & Services	Revenue from remanufactured products and remanufacturing services	Quantitative	Reporting Currency	RT-IG-440b.1	Our Maintenance Services business generated 10.3% of Greenbrier's FY23 annual revenue and relies heavily on remanufactured and scrap steel materials.		Target 8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-Year Framework of Programmes on Sustainable Consumption and Production, with developed countries taking the lead.

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Recommended Disclosure

Fiscal Year 2023 Business Response

	Recommended Disclosure	Fiscal Year 2023 Business Response
Governance	<p>a) Describe the board's oversight of climate-related risks and opportunities.</p>	<p>The Greenbrier Board has ultimate accountability for our climate-related risks and opportunities through our Enterprise Risk Management (ERM) program. Greenbrier's governance structure is designed to monitor and address emerging risks, including climate and other ESG-related risks at multiple levels within the company and at quarterly Board meetings. The company's Nominating & Governance Committee oversees Greenbrier's ERM program, Environmental, Social and Governance (ESG) strategy and climate risk.</p> <p>In addition, the Board's Nominating and Governance Committee oversees the company's ESG report as well as the actions and steps taken toward its ESG goals. See Greenbrier's Governance Committee Charter for details on the Committee's functions. Greenbrier also tracks several environmental metrics and sets sustainability-related targets, including a greenhouse gas reduction goal.</p>
	<p>b) Describe management's role in assessing and managing climate-related risks and opportunities.</p>	<p>Greenbrier's CEO and president, who is also a Board member, holds the highest level of responsibility for organizational management and climate change risk mitigation. The CEO bridges the ERM Committee and Risk Owners with the Board to deliver updates on risks, including climate-related risks and opportunities.</p> <p>Greenbrier's ERM program is led by the ERM Risk Committee. The committee includes senior leadership in the organization and identifies risk owners who are responsible for analyzing risks related to their areas of operation. The risk owners provide the ERM Risk Committee regular updates on their assigned risks which are then presented to the Board of Directors for review and consideration. See page 50 for our ERM process.</p> <p>The risk owners for climate risks and opportunities are the heads of Environment, Health & Safety and Corporate Communications & External Affairs.</p> <p>Greenbrier's SVP of Communications & External Affairs leads the ESG team, drives Greenbrier's ESG strategy and manages goals and initiatives related to the report, including climate-related targets.</p>
Strategy	<p>a) Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term.</p>	<p>Climate risk is tracked, stratified and reported as part of Greenbrier's overall ERM program. There are always risks associated with the cost of business operations and increasing sustainability efforts. Greenbrier remains a relatively small contributor to GHG emissions and other environmental factors. Railcars have a life span of 30 to 50 years. This means the CO₂e released in the initial manufacturing process is spread over three or more decades that the railcar is in service. As a result, Greenbrier's GHG intensity at an enterprise level is lower than that of comparable manufacturers.</p> <p>The opportunities related to climate change are inherent in Greenbrier's business because the company participates in supporting an energy-efficient mode of transportation, which has seen increased demand in recent years. For example, Greenbrier is the largest railcar builder in Europe and the EU set a goal in 2022 to double freight rail's modal share by 2030, both to reduce the transport sector's CO₂ emissions and to ease traffic congestion. In addition, Greenbrier continually works to increase environmental efficiency in the design and manufacturing process. This is evidenced by the introduction of Sustainable Conversions and the high-strength steel gondola. See pages 24 and 25.</p>

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Recommended Disclosure

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	Recommended Disclosure	Fiscal Year 2023 Business Response
Strategy		<p>Short term (<5 years): Legislation and new rules to regulate GHG emissions have been introduced in numerous state legislatures, the U.S. Congress, and by the EPA. We recognize that new climate change reporting or compliance protocols could affect our operating costs, the demand for our products and/or affect the price of materials.</p> <p>Medium term (5-10 years): Increased frequency of severe weather events that could affect operations at our manufacturing facilities, the price of insuring company assets, or other unforeseen disruptions of our operations, systems, property or equipment.</p> <p>Long term (10+ years): Climate change may positively or negatively impact demand for our products or the ability of our suppliers to meet our needs.</p> <p>Physical Risks: Acute risks at Greenbrier could include sudden event-driven issues, such as floods or other natural disasters. Chronic risks include sustained climate patterns such as higher temperatures and drought levels. Greenbrier locations are not in high-risk locations for sea level rise.</p> <p>Transition Risks: Policy and legal risks include enhanced reporting obligations and regulatory activity, higher cost of energy and GHG mitigation. Technology risks include the cost of moving to lower emissions technology, particularly in locations with less accessibility to solar power. Market risks include changing customer behavior in support or against climate change measures and raw material (primarily steel) costs. Reputation risks include changes in demand due to customer preferences and challenges seen at a macro-industry level.</p> <p>Greenbrier completed an internal SWOT analysis for climate risk and opportunities.</p>
	<p>b) Describe the impact of climate-related risks and opportunities on the organization’s businesses, strategy and financial planning.</p>	<p>Greenbrier is evaluating a process to assess the impact of climate-related risks and opportunities on our business strategy and financial planning. Greenbrier routinely consults with its customers on innovating product designs for lighter weight and improved aerodynamics. Greenbrier is also in active conversations regarding how its products can adapt to or contribute benefits arising from new forms of rail motive power such as hydrogen and other clean burning fuels.</p>
	<p>c) Describe the resilience of the organization’s strategy, taking into consideration different climate-related scenarios, including a 2 degree or lower scenario.</p>	<p>Greenbrier does not currently employ a formal climate-related scenario analysis. It has identified a vendor to evaluate the feasibility of hosting a 2°C or lower scenario planning event in fiscal year 2024. In addition, Greenbrier measures and identifies the risks from highest to lowest by accounting for likelihood, severity and frequency.</p>
Risk Management	<p>a) Describe the organization’s processes for identifying and assessing climate-related risks.</p>	<p>Greenbrier’s ERM program is used to evaluate risks that have the potential to substantially impact Greenbrier, and therefore shareholder value. Among these risks is climate change. The process for all identified risks is as follows: 1) Employees and stakeholders identify enterprise risks and risk owners are identified to develop mitigation activities; 2) The Risk Management Committee reviews and selects risks on a quarterly basis to agree on mitigation activities and help ensure appropriate resources are available; 3) The Nominating & Governance Committee reviews significant risks on a quarterly basis.</p> <p>We also identify extreme weather-related climate risk through coordination with our property insurer.</p> <p>Greenbrier also considers existing and emerging regulatory requirements related to climate change in its evaluations.</p>

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Recommended Disclosure

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Risk Management	Recommended Disclosure	Fiscal Year 2023 Business Response
Risk Management	b) Describe the organization's processes for managing climate-related risks.	<p>Climate-related events have the potential to positively or negatively impact Greenbrier's relations with investors, customers, employees, suppliers, communities and policymakers. Greenbrier is working on a more formal climate-risk management process.</p> <p>Greenbrier obtains engineering recommendations for facility hardening related to extreme weather climate-related risks and implements as necessary.</p> <p>The climate risk owner ranks the risk by likelihood, severity and frequency in an ERM Risk Report. These findings are reported to the ERM Committee. The risk report details action steps, measurements, cost to implement and the due date for climate risk management tasks.</p>
	c) Describe the processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management.	<p>Greenbrier integrates ESG and climate-related issues into our ERM program. The company's Nominating & Governance Committee oversees Greenbrier's ERM program. Further, Greenbrier's EHS team is engaging in third-party environmental compliance audits at several locations. Collectively these actions track progress and with the goal of ensuring that appropriate actions are taken to mitigate risk.</p>
	Metrics & Targets	a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.
b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.		<p>Greenbrier tracks Scope 1 and Scope 2 GHG emissions. See page 42 of this report.</p>
c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.		<p>Greenbrier set a GHG reduction goal to reduce its intensity-based Scope 2 GHG emissions by 20% in the next five years. Additional targets related to the GHG reduction goal can be found on page 42. Consistent with our adherence to the SDGs, we have a target to achieve our Responsible Consumption and Production targets by 2030. See page 64.</p>

Disclaimers

Except where otherwise noted, this report contains data from fiscal year 2023 (September 1, 2022 to August 31, 2023).

Forward Looking Statements

This report may contain forward-looking statements, including statements that are not purely statements of historical fact.

Greenbrier uses words, and variations of words, such as “achieve,” “adhere,” “advance,” “align,” “believe,” “build,” “by,” “can,” “commit,” “conduct,” “continue,” “create,” “dedicate,” “deliver,” “demonstrate,” “develop,” “enhance,” “ensure,” “establish,” “evolve,” “expand,” “generally,” “goal,” “grow,” “identify,” “implement,” “incorporating,” “increase,” “initiate,” “introduce,” “maintain,” “make,” “manage,” “prioritize,” “progress,” “provide,” “reduce,” “strategy,” “strive,” “support,” “target,” “will,” “work” and similar expressions to identify forward looking statements.

These forward-looking statements are not guarantees of future performance and are subject to certain risks and uncertainties that could cause actual results to differ materially from the results contemplated by the forward-looking statements. Factors that might cause such a difference include, but are not limited to, the following: (1) An economic downturn and economic uncertainty may adversely affect demand for our products and services. Unfavorable economic conditions may lead our customers to delay or reduce purchases of our products and services,

result in lower sales volumes, lower prices, lower lease utilization rates and decreased revenues and profits, all of which can impact our ability to achieve our ESG goals. (2) We rely on limited suppliers for certain products and services. If we are not able to procure products or services on commercially reasonable terms or on a timely basis, our business, financial condition, results of operations and progress toward achieving our ESG goals would be adversely affected. (3) Our success depends on our ability to attract, retain and motivate senior management and other key employees. Achieving this objective may be difficult due to many factors, including fluctuations in global economic and industry conditions, competitors’ hiring practices, cost reduction activities and the effectiveness of our compensation programs.

More information on potential factors that could cause our results to differ from our forward-looking statements is included in the company’s filings with the SEC, including in the “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” sections of the company’s most recently filed periodic report on Form 10-K. Except as otherwise required by law, the company assumes no obligation to update any forward-looking statements or information, which speak as of their respective dates. Readers are cautioned not to place undue reliance on these forward-looking statements, which reflect management’s opinions only as of the date hereof.



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